CHAPTER I: ECONOMIC SECTOR

1.1 Introduction

This Chapter of the Audit Report for the year ended 31 March 2018 deals with the findings of audit on the State Government units under Economic Sector.

The names of the State Government departments and the break-up of the total budget allocation and expenditure of the State Government under Economic Sector during the year 2017-18 are given in **Table 1.1.1.**

Table 1.1.1: Details of allocation and expenditure under Economic Sector

(₹in crore)

Name of the Departments	Total budget allocation	Expenditure
Co-operation Department	35.30	26.69
Public Works (Roads & Buildings) Department	989.67	703.27
Power Department	113.64	74.66
Public Works (Water Resource) Department	182.06	88.23
Information and Cultural Affairs Department	34.10	31.33
Industries & Commerce Department	86.35	86.57
Industries & Commerce (Handloom, Handicrafts & Sericulture) Department	32.72	25.26
Fisheries Department	55.74	42.23
Agriculture Department	351.18	249.29
Horticulture Department	98.78	63.05
Animal Resources Development Department	102.67	85.99
Forest Department	101.87	91.77
Science, Technology and Environment Department	8.95	6.65
Factories and Boilers Organisation	3.10	2.42
Information Technology Department	12.44	9.51
Tourism Department	6.51	3.27
Total number of Departments = 16	**2,215.08**	**1,950.17**

Source: *Appropriation Accounts – 2017-18.*

Besides the above, the Central Government had transferred a sizeable amount of funds directly to the implementing agencies under the Economic Sector in the State during the year 2017-18. The major transfer of funds (₹ five crore and above) to the State implementing agencies for implementation of flagship programmes of the Central Government are detailed in **Table 1.2.1**.

Table 1.2.1: Funds (₹ 5 crore and above) transferred to State implementing agencies

(₹in crore)

Name of the Department	Name of the Scheme/Programme	Implementing agency	Amount transferred
Industries and Commerce Department	North East Region - Textile Promotion Scheme	Director of Handloom, Handicrafts and Sericulture, Government of Tripura	20.04
	Infrastructure Development and Capacity Building	Tripura Industrial Development Corporation Limited	10.38
	Industrial Infrastructure Upgradation Scheme (IIUS)-Department of Industrial Policy and Promotion (DIPP)		21.37
	Trade Infrastructure Export Schemes		6.15
Tourism Department	Apprenticeship and Training	Society for Entrepreneurship Development	6.77
Total			**64.71**

***Source**: 'Central Plan Scheme Monitoring System' portal in Controller General of Accounts' website*

1.2 Planning and conduct of Audit

Audit process starts with the assessment of risks faced by various departments of Government based on expenditure incurred, criticality/ complexity of activities, level of delegated financial powers, assessment of overall internal controls, *etc*.

After completion of audit of each auditable entity, Inspection Reports (IRs) containing the audit observations are issued to the heads of the departments. The departments are requested to furnish replies to the audit findings within one month of receipt of the IRs. Whenever replies are received, audit findings are either settled or further action for compliance is advised. The important audit observations arising out of those IRs are processed for inclusion in the Audit Reports, which are submitted to the Governor of the State under Article 151 of the Constitution of India for being laid in the State Legislature.

During 2017-18, 25 units of the State Government under Economic Sector were test checked during audit involving an expenditure of ₹ 1,012.46 crore (including expenditure pertaining to previous years audited during the year). This chapter contains one Performance Audit on "Agriculture Department" and four Compliance Audit paragraphs.

1.3 Response of the Government/ departments towards audit

The Accountant General (Audit), Tripura conducts periodical inspection of the Government departments to test-check the transactions and verify the maintenance of important accounts and other records as prescribed in the rules and procedures. These inspections are followed up with Inspection Reports (IRs) incorporating irregularities detected during the inspection and not settled on the spot, which are issued to the heads of the offices inspected, with copies to the next higher authorities for taking prompt corrective action. The heads of the offices/ Government are required to promptly comply with the observations contained in the IRs, rectify the defects and omissions and report compliance through initial reply to the Accountant

General (Audit) within one month from the date of issue of the IRs. Serious financial irregularities are reported to the heads of the departments and the Government.

There are 1,330 paragraphs involving ₹ 697.62 crore relating to 246 IRs issued which remained outstanding at the end of June 2018 under Economic Sector. Year-wise position of outstanding IRs, paragraphs and money value involved for the last five years as on 30 June 2018 are given in **Table 1.3.1**.

Table 1.3.1: Details of pending IRs

Position of IRs	Up to June 2014	June 2015	June 2016	June 2017	June 2018	Total
Number of IRs pending for settlement	70	43	62	52	19	246
Number of outstanding audit observations	300	196	359	342	133	1330
Money value involved (₹ *in crore*)	211.09	132.74	148.66	138.90	66.23	697.62

The details in **Table 1.3.1** indicated that the departments were not serious in taking necessary action for final settlement of such cases.

AGRICULTURE DEPARTMENT

1.4 Agriculture Department

Tripura is primarily an agrarian State with 51 per cent of the main work forces including 27 per cent cultivators and 24 per cent agricultural labourers directly dependent on agriculture. The main objectives of the Agriculture Department are to minimise the gap between requirement and production of food grains by increasing production and productivity to ensure food security and to improve the socio-economic condition of the farmers. The Performance Audit of Agriculture Department was undertaken to assess the performance of the Department in terms of planning, financial management, programme implementation, ensuring food security, human resource management and internal control mechanism.

Highlights

Instead of preparing Annual Plan before the start of the year, State Annual Plans (SAPs) for 2013-18 were prepared only after allocation of funds and there were delays in finalisation of SAPs.

(Paragraph No. 1.4.7.1)

The Finance Department released ₹ 1,492.40 crore against the budget estimates of ₹ 1,847.85 crore resulting in short release of ₹ 355.45 crore during 2013-18. Department spent ₹ 1,415.44 crore during 2013-18. There were persistent savings every year indicating a wide gap between planning and programme implementation.

(Paragraph No. 1.4.8.1)

The Agriculture Department targeted installation of 5,336 Small Bore Deep Tube Wells (SBDTWs) during 2013-18 with a view to covering 10,672 ha under irrigation, of which installation of 2,994 (56.11 *per cent*) SBDTWs was not done due to paucity of fund.

(Paragraph No. 1.4.9.5)

Prescribed assistance norms were not adopted under System of Rice Intensification while significant shortfall in implementation of various interventions was noticed under National Food Security Mission.

{Paragraphs No. 1.4.10.1(i) & 1.4.10.2}

Even after meeting 94.50 *per cent* projected requirement of rice through domestic production, the State was still dependent on Public Distribution System to ensure stable supply of rice to meet the demand of increasing population. This implied that the State was yet to achieve self-reliance in production of rice.

(Paragraph No. 1.4.11)

Neither mandatory records were maintained nor was mandatory contribution, out of the revenue realised from the market, transferred to the board fund. Administrative delay towards implementation of major reforms under Agriculture Produce Market Committee (APMC) Act and electronic-National Agriculture Market (e-NAM) was also a major area of concern.

(Paragraph No. 1.4.13)

There were substantial vacancies in some of the key posts ranging from 26 *per cent* to 96 *per cent,* which adversely affected programmes and schemes implemented by the Department.

(Paragraph No. 1.4.15)

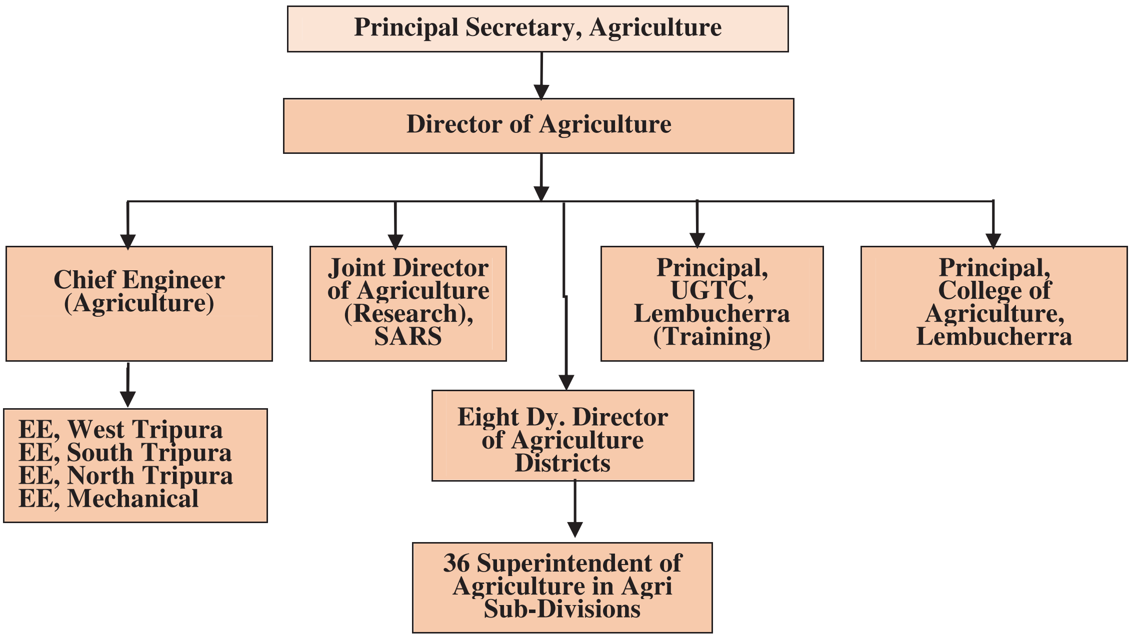
1.4.1 Introduction

Tripura is primarily an agrarian State with 51 *per cent* of the main work forces including 27 *per cent* cultivators and 24 *per cent* agricultural labourers directly dependent on agriculture. Agriculture is the dominant sector of the State with a contribution of 23 *per cent* of Net State Domestic Product (NSDP) as against the national average of 13.90 *per cent*. The State has a geographical area of 10.49 lakh hectares (ha) of which gross cropped area is 4.83 lakh ha and net-cropped area is 2.55 lakh ha. The main objectives of the Agriculture Department are to minimise the gap between requirement and production of food grains by increasing production and productivity[1] to ensure food security and to improve the socio-economic condition of farmers. With a view to achieving these objectives, the Department implements various schemes like Rashtriya Krishi Vikas Yojana (RKVY), National Food Security Mission (NFSM), National Mission for Sustainable Agriculture (NMSA), National Mission on Oilseeds and Oil Palm (NMOOP), *etc.* and undertakes activities like seed management, soil testing, farm mechanisation, infrastructure development, agricultural marketing, extension reform programmes, *etc.*

1.4.2 Organisational Set-up

The organisational set-up of the Agriculture Department, Government of Tripura is given in the organogram below:

[1] production per unit area



1.4.3 Scope of Audit

The performance of the Department in implementation of different programmes and other activities[2] towards agricultural development in the State for the period from 2013-14 to 2017-18 was reviewed by Audit during April-July 2017 and subsequently in April-July 2018 through test check of records of the Directorate of Agriculture, Joint Director of Agriculture (Research), State Agriculture Research Station (SARS), Principal of Upgraded Gram Sevak Training Centre (UGTC), Deputy Director of Agriculture, West Tripura District and the Executive Engineer (Agri), West Tripura District, as they were units of the Capital District. Three[3] out of seven other Deputy Directors of Agriculture (DDAs) and seven[4] out of 21 Superintendents of Agriculture (SAs) linked to four DDAs were selected for audit by Simple Random Sampling Without Replacement (SRSWOR) method. Further, another three SAs[5] were selected to extend the audit coverage. Details of districts, Agri sub-divisions and units selected for Performance Audit are given in **Appendix 1.4.1**.

1.4.4 Audit Objectives

The objectives of the Performance Audit (PA) were to ascertain whether:

a. the planning and financial management of the Department was efficient and effective;

[2] Audit covered five Centrally Sponsored Schemes namely RKVY, NFSM, NMOOP, NMSA and Crop Insurance, out of eight schemes implemented by the Department besides, activities like performance of different testing labs, training, farm machination, performance of seed production, production and productivity of crops, *etc.*

[3] DDAs of South Tripura, Sepahijala and North Tripura District

[4] SAs at Bagafa, Bishalgarh, Dukli, Kadamtala, Melaghar (renamed as Boxanagar), Mohanpur and Satchand

[5] SAs at Matabari under DDA, Gomati; Kumarghat (renamed as Gournagar) under DDA, Unakoti and Salema (renamed as Durgachowmuhani) under DDA, Dhalai

b. the programmes were implemented as per their respective guidelines in an efficient and effective manner;

c. efforts were made by the Government to achieve "self-reliance" in food;

d. the manpower was sufficient and was managed efficiently and effectively; and,

e. internal control mechanism was adequate and effective.

1.4.5 Audit Criteria

Audit findings were benchmarked against the following criteria:

a. General Financial Rules, 2005 and 2017, Central Treasury Rules, 1999, Delegation of Financial Power Rules, Tripura, 2011, Tripura Agriculture Produce Markets Act, 1980 and Rules, 1985, Agriculture Produce Market Committee Act, 2003;

b. Agriculture Road Map, 2013-17; Perspective Plan, 2000-12; Annual and Work Plans of the Department and State Agriculture Policy;

c. Policies, Rules and Regulations, Project Reports, Minutes of meetings, Research Papers, Journals and Scheme guidelines; and,

d. Orders/ Memorandum/ Notifications issued by the Central/ State Government.

1.4.6 Audit Methodology

PA commenced with an Entry Conference on 18 April 2017 with the Principal Secretary, Agriculture Department and other departmental officers, wherein the audit objectives, scope of audit and audit criteria were discussed. Replies furnished by the Department to audit memos, records of the Department and data collected through questionnaires and findings during physical verification were also used as evidence in audit. Exit Conference was held with the Additional Chief Secretary, Agriculture Department on 20 December 2018. The results of discussion in the Exit Conference were incorporated in the report wherever appropriate.

1.4.7 Planning

Perspective planning refers to long-term planning in which long-range targets are set in advance and targets are to be achieved within the specified period by dividing it into several short-term plans.

There was no State Agriculture Policy of the Department. However, Perspective Plan for achieving self-sufficiency in production of food grains was prepared for the period 2001-2010 which was extended for two years up to 2012 with a target to produce 8.61 lakh Metric Ton (MT) of food grains by the end of 2011-12. However, the Department could produce only 7.30 lakh MT against the target. The focus area of the Perspective Plan was to increase paddy production only and not much attention was given to other crops. Besides, non-availability of adequate quantity of nutrients, inadequate adoption of improved technology and shortage of irrigation facility and field functionaries were the major constraints in implementation of the Perspective Plan.

Thereafter, an Agriculture Road Map (ARM) was prepared for 2013-17 to mitigate the shortcomings of the Perspective Plan. However, 2012-13 and 2017-18 were not covered by any long-term plan. Instead, State Annual Plans were prepared for these years. Audit observed that the Department did not prepare any long-term plan after 2011-12.

As regards to the Agriculture Policy, it was assured during the Exit Conference that Department would prepare long term, mid-term and short-term vision documents.

1.4.7.1 Preparation of Agriculture Road Map

The focus areas of the ARM were to increase production and productivity of crops namely paddy, maize, pulses and oil seeds by increasing production of High Yielding Variety (HYV) seeds, increased use of chemical and bio-fertilisers, increasing farm mechanisation and adopting diversified farming. Besides, creation of strong marketing network and processing facilities for agriculture produce, Gram Panchayat (GP) wise advance crop planning and re-organisation of the Department were also included in the ARM. To achieve the targets stated under ARM, State Annual Plans were prepared by the Department every year during 2013-18. Audit observed that State Annual Plans for 2013-18 were prepared only after receipt of allocation of funds for the ongoing State and Centrally Sponsored Schemes (CSSs). The plans were not prepared before the commencement of respective financial year except 2015-16 and there was delay of two to five months[6] in their finalisation. This resulted in delay in communication of targets of the schemes to the implementing agencies. Annual plans of the Department in respect of input management, soil testing, agricultural mechanisation, irrigation, training and research were prepared in a routine and ad-hoc manner. GP-wise advance crop planning was also not included in the State Annual Plans. Therefore, priorities of the Department were not properly included in the State Annual Plans.

Department accepted the audit observations.

1.4.7.2 Planning under National Food Security Mission

As envisaged in the NFSM scheme guidelines, baseline survey and feasibility studies to assess the resource endowments of the farmers and the level of crop productivity were to be carried out by the Department.

Further, at district level District Food Security Mission Executive Committee (DFSMEC) was to prepare the District Level Annual Action Plan (DAAP) for each district involving Panchayati Raj Institutions (PRIs), which was to be integrated into the State Action Plan. Besides, concurrent evaluation to identify the strengths and weaknesses of implementation of the programme and factors responsible for them

[6] 2013-14: three months (July), 2014-15: two months (June), 2016-17: two months (June), 2017-18: five months (September).

was to be conducted. Activity map suitable to the local conditions was also to be prepared by the Department involving PRIs for selection of interventions as per local needs.

Audit observed that baseline survey, feasibility study and concurrent evaluation were not done and activity map was also not prepared. Therefore, data and information regarding actual demand from the grass root level were not collected to assess the requirement and setting of targets accordingly.

It was also observed that the DAAP under NFSM was not prepared at the district level. The Mission Director prepared DAAP for districts, without obtaining inputs and without requisite consultations from the respective districts and communicated the same to the districts for implementation. Therefore, the bottom-up approach of planning was not followed and need based targets as per local demand were not set.

During the Exit Conference, the Department accepted the fact that SAPs were prepared without incorporating inputs from the ground level. However, the Department assured that proper care would be taken in preparation of the plan documents by taking inputs from all the stakeholders.

1.4.7.3 Target and achievement of Agriculture Road Map

Further analysis of the ARM and data of the production and productivity of different crops revealed that the Department had failed to achieve the targets of ARM fixed for the year 2016-17 in respect of pulses, oil seeds and wheat and the same could not be achieved even by the end of 2017-18. Resultantly, the vision of crop diversification as envisaged in the ARM remained un-achieved.

It was noticed in audit that:

a. Production of pulses and oilseeds remained behind the target by 24.80 *per cent* and 11.31 *per cent* despite their area expansion by 8.94 *per cent* and 8.98 *per cent* respectively. As a result, productivity of the crops lagged behind the target by 31 *per cent* and 18.60 *per cent* receptively;

b. Though the productivity of wheat had increased by 9.95 *per cent*, production lagged behind the target by 81.20 *per cent*;

c. In case of maize, area and production had increased but there was shortfall in productivity by 4.53 *per cent*; and

d. In respect of paddy, area, production and productivity increased in the State by 1.64 *per cent,* 2.46 *per cent* and 0.78 *per cent* over the target set in the ARM for 2016-17 (**Appendix 1.4.2**).

Audit further observed that targets for production of seeds of different crops and distribution of fertilisers showed a fluctuating trend and was not commensurate with the target of area and production of different crops.

Recommendation No. 1

i. *The Department should prepare a long-term plan with participatory and bottom-up approach involving PRIs for attaining self-sufficiency in food production.*

ii. *The Department should also give special emphasis to crop diversification for sustainable agriculture and to make the farming economically remunerative.*

1.4.8 Financial Management

1.4.8.1 Budget and expenditure control

The budget estimates[7] made (Grant No.19, 20 and 27), funds released by the Finance Department and expenditure incurred during 2013-18 are shown in **Table 1.4.1**.

Table 1.4.1: Details of Budget Estimates, Fund released and Expenditure incurred

(₹in crore)

Year	Revenue Account			Capital Account			Total		
	Budget estimates	Fund Released	Exp.	Budget estimates	Fund Released	Exp.	Budget estimates	Fund Released	Exp.
2013-14	181.95	183.45	180.50	103.26	63.48	52.79	285.21	246.93	233.29
2014-15	249.39	231.64	230.28	184.95	67.38	52.74	434.34	299.02	283.02
2015-16	256.61	210.89	200.29	137.68	90.84	66.81	394.29	301.73	267.10
2016-17	286.08	237.42	236.02	117.00	93.47	89.55	403.08	330.89	325.57
2017-18	283.33	266.89	264.76	47.60	46.94	41.70	330.93	313.83	306.46
Total	**1257.36**	**1130.29**	**1111.85**	**590.49**	**362.11**	**303.59**	**1847.85**	**1492.40**	**1415.44**

Source*: Information furnished by the Department* *Exp:-Expenditure*

The Finance Department released ₹ 1492.40 crore against the budget estimate of ₹ 1847.85 crore resulting in short release of ₹ 355.45 crore during 2013-18. The funds released by the State Finance Department under Revenue and Capital Account ranged from ₹ 247 crore (2013-14) to ₹ 331 crore (2016-17) while the expenditure ranged from ₹ 233 crore (2013-14) to ₹ 307crore (2017-18).

Table 1.4.2: Details of savings under Plan and Non-Plan budget

(₹in crore)

Year	Plan			Non Plan		
	Fund released	Expenditure	Savings	Fund released	Expenditure	Savings
2013-14	134.90	121.27	13.63	112.03	112.02	0.01
2014-15	176.93	162.75	14.18	122.10	120.26	1.84
2015-16	152.92	118.32	34.60	148.82	148.78	0.04
2016-17	162.81	157.51	5.30	168.07	168.07	0.00
2017-18	110.40	103.07	7.33	203.43	203.39	0.04
Total	**737.96**	**662.92**	**75.04**	**754.45**	**752.52**	**1.93**

Source: *Information furnished by the Department*

It is evident from above table that during 2013-18, persistent savings under plan ranged between ₹ 5.30 crore (2016-17) and ₹ 34.60 crore (2015-16) while overall savings was ₹ 75 crore (*i.e.*10.17 *per cent*) during 2013-18 under plan. This indicated gap between planning and programme implementation

[7] Budget estimate included funds under RKVY scheme. Besides, the Department also received central share for other Centrally Sponsored Schemes

The Department stated during the Exit Conference that annual budget would be prepared after obtaining actual requirement of funds and monthly expenditure statements from every level.

1.4.8.2 Retention of cash balance

Scrutiny of records of the Directorate of Agriculture revealed that there were unspent cash balances of ₹ 86.68 crore under 49 units as of March 2018.

Further, test check of records of 16 selected units[8] revealed that the Drawing and Disbursing Officers (DDOs) retained scheme funds of ₹ 28.12 crore since 2013-14 in their respective bank accounts as of March 2018 as shown in **Appendix 1.4.3**.

Besides, it was also noticed that in seven units[9], scheme funds of ₹ 14.83 crore was kept (March 2018) in Civil Deposit. Audit observed that the retention of fund and fund kept under Civil Deposit pertained to various schemes *viz*. NFSM, NMOOP, RKVY, Soil Health Management (SHM), Rain-fed Area Development (RAD), National Mission for Sustainable Agriculture (NMSA) and civil works mainly due to poor implementation of schemes as discussed in succeeding sub-paragraphs under **Paragraph 1.4.10**.

On this being pointed out, the Department stated (August 2018) that second instalments against most of the central schemes were received in fourth quarter in each financial year and were drawn by the DDOs of the units concerned in March every year to keep the same under bank accounts for payments during the next financial year. The Department further stated that in some cases, funds were drawn by the DDOs for implementing programmes within next 60 days but the same could not be implemented within the anticipated period. The reply was not acceptable as the funds were drawn and kept in the bank accounts since 2013-14.

1.4.8.3 Utilisation Certificates

As per Rule 212 (1) of the General Financial Rules (GFRs), 2005, the Utilisation Certificates (UCs) should be submitted within twelve months of the closure of the financial year by the institution or organisation concerned.

Scrutiny of records revealed that in case of four units[10], UCs of ₹ 0.68 crore against the total amount of ₹ 1.66 crore drawn between the period from November 2016 to

[8] (i) JDA (SARS): ₹ 3.92 crore, (ii) DDA(W): ₹ 0.83 crore, (iii) EE (West): ₹ 4.23 crore, (iv) SA Dukli: ₹ 0.33 crore, (v) SA Mohanpur: ₹ 0.88 crore, (vi) SA Bishalgarh: ₹ 3.13 crore, (vii) DDA(N): ₹ 0.81 crore, (viii) SA Kadamtala: ₹ 2.00 crore, (ix) SA Gournagar: ₹ 2.02 crore, (x) SA Durgachowmuhani: ₹ 1.15 crore, (xi) DDA (South) ₹ 1.94 crore, (xii) SA Satchand: ₹ 2.45 crore and (xiii) SA Bagafa: ₹ 2.32 crore (xiv) SA, Matabari: ₹ 0.65 crore, (xv) SA, Boxanagar: ₹ 0.31 crore and (xvi) DDA, Sepahijala: ₹ 1.16 crore

[9] (i) SA Kadamtala: ₹ 0.34 crore, (ii) SA Dukli: ₹ 0.15 crore(iii) SA Mohanpur: ₹ 0.89 crore (iv) SA Gournagar: ₹ 3.50 crore (v) SA Bagafa: ₹ 0.66 crore (vi) SARS, Agartala: ₹ 0.61 crore (vii) EE (West): ₹ 6.93 crore

[10] (i) SA Kadamtala: ₹ 8.66 lakh (ii) SA Satchand: ₹ 9.85 lakh against ₹ 17.61 lakh (iii) DDA South: ₹ 23.18 lakh against ₹ 44.71lakh (iv) SA Mohanpur: ₹ 26.64 lakh against ₹ 89.27 lakh

April 2018 pertaining to RKVY, NMSA and various civil works were submitted[11] without incurring any expenditure.

While accepting the fact, the Department stated (November 2018) that UCs were submitted to tap fund from the GoI in anticipation of achievement of the items for which fund were placed. Thus, failure of the competent authority *i.e.* Director of Agriculture, to ensure monitoring and utilisation of the grants, resulted in submission of fake UCs by the Department without incurring expenditure for the purpose they were granted.

Recommendation No. 2

i. *The annual budget should be prepared on a realistic basis by obtaining requirement of funds and monthly expenditure statements from every level. The Department should avoid the accumulation of unspent balances by timely spending on various programmes/ schemes and by increasing pace of implementation.*

ii. *The Department should utilise the scheme fund for the purpose for which it is drawn and ensure that UCs are submitted after incurring utilisation of funds.*

iii. *Necessary administrative action may be initiated against the officers responsible for violation of Financial Rules.*

1.4.9 Input Management

The backbone of agricultural development is access of farmers to modern agricultural inputs, which range from improved seeds, fertilisers, pesticides to machinery, irrigation, *etc.* Good quality seeds are critical to successful crop production while fertiliser supplies nutrients to the soil that are essential for growth. Pesticides control weeds species, harmful insects and plant diseases that afflict crops. Besides, technical knowledge and machinery enhance human labour effectiveness and increase farm productivity. Irrigation is also essential for growth as it enables off-season farming, provides potential for multiple harvests per year and brings additional land under cultivation.

1.4.9.1 Seed Management

Good quality seed is one of the most critical inputs for enhancing the productivity of crops. Seed used for sowing should be genetically pure and have high germination capacity. Breeder seed is produced from nucleus seed under the supervision of a qualified plant breeder in a research institute. This process provides for initial and recurring increase of foundation seed. Breeder seeds obtained from research institute are multiplied as foundation seeds through State Seed Multiplication Farms (SMFs) and Demonstration Farms (DFs). The foundation seeds are further multiplied as certified seeds in farms of selected progressive farmers under Registered Growers Programme. Production of a particular class of seed starting from breeder stage to certified stage is depicted in **Chart 1.4.1.**

[11] SA to DDA and DDA to Director

Chart: 1.4.1: Process of production of certified seeds

Breeder seed → **Foundation seed** → **Certified seed**

The seeds thus produced are processed in seed processing units and certified by seed certification agency of the Department.

(i) Production of foundation Seeds

Scrutiny of records of Joint Director, SARS revealed that there were 11 SMFs[12] and three DFs[13] in the State where foundation seeds were produced from breeder seeds collected from different research institutes from outside of the State. The Department started production of pulses, oilseeds and jute foundation seeds in Government farms[14] from 2010-11 to reduce the cost of procurement of seeds from outside of the State. The targets for production of foundation seeds in Government farms and achievement thereagainst during 2013-18 are shown in **Appendix 1.4.4**.

Audit observed that the performance of the Department in production of foundation seeds was poor and ranged from 25.97 *per cent* (2013-14) to 58.89 *per cent* (2017-18). Further, it was observed that less coverage of targeted area, which ranged from 52.63 *per cent* (2013-14) to 83.74 *per cent* (2017-18), was one of the main reasons for the poor production of foundation seeds despite the gradual increase in coverage of area as shown in **Appendix 1.4.4**.

Scrutiny of records of the two test checked SMFs (Churaibari and Nalchar) and one test checked DF (Manu) also revealed the same trend as stated below:

a. In Nalchar farm, the cropping programme of foundation seeds in respect of oilseed and pulses was not taken up at all during 2013-18. In respect of paddy, the achievement of Nalchar farm was 39 *per cent*.

b. The achievement of production in Churaibari farm during 2013-18 was 58 *per cent*, 50 *per cent* and three *per cent* for paddy, pulses and oilseeds respectively.

c. In respect of Manu farm, achievement during 2013-18 in production of paddy and oilseeds was 38 *per cent* and 16 *per cent* respectively while production of pulses was taken up only during 2017-18.

Audit observed that poor performance of Government farms was attributed to non-availability of technically skilled workers and irrigation facilities, heavy rainfall, cattle grazing, absence of fencing, *etc.*

---

[12] (i) Avanga, (ii) Amlighat, (iii) Churaibari, (iv) Gakulpur, (v) Hichacherra, (vi) Karamcherra, (vii) Kathaliacherra, (viii) Nalchar, (ix) Rankhang, (x) Rupaichari and (xi) Teliamura

[13] (i) Bankaraibari, (ii) Lalcherra and (iii) Manu

[14] Seed Multiplications Farms (SMFs) and Demonstration Farms (DFs)

(ii) Shortfall in production of Certified Seeds

Certified seeds are produced in progressive farmers' fields under Registered Growers Programme (RGP). For this purpose, registered farmers were provided with foundation seeds at subsidised rates. The seeds so produced by the farmers were to be procured by the Department for certification**.**

It was noticed in audit that the production trend of paddy seeds was close to targets exhibiting more than 85 *per cent* achievement. However, shortfall in production of oilseeds ranged from 9.14 *per cent* (2014-15) to 60.62 *per cent* (2017-18); while, the production in respect of pulses and jute seeds ranged from 13.50 *per cent* (2017-18) to 38.39 *per cent* (2014-15) and from 3.73 *per cent* (2016-17) to 23.22 *per cent* (2015-16) respectively (**Appendix 1.4.5).**

Shortfall in production of foundation and certified seeds was one of the reasons for non-achievement of self-sufficiency in food grains production in the State.

The Department stated (August 2018) that production target could not be achieved due to delay in arrival of breeder seeds from outside of the State, delay in sowing, lack of irrigation facilities and open grazing due to absence of boundary fencing, non-availability of skilled workers and unfavourable weather conditions. Reply was not acceptable as fixation of target for production of seeds was not proportionate to expansion of area under cultivation.

During the Exit Conference, it was assured that action would be taken to attain self-sufficiency in production of high yielding hybrid seeds.

1.4.9.2 Nutrient management

Chemical fertilisers as well as organic manure are to be used adequately and in a balanced manner to improve agricultural production.

(i) Performance of Soil Testing Amenities

National Mission for Sustainable Agriculture (NMSA) has been formulated by GoI for agricultural growth by promoting sustainable use of scarce natural resources (*e.g.* soil, water, *etc.*) through appropriate location specific measures. Soil Health Management (SHM) and issue of Soil Health Cards (SHCs)[15] are important interventions under NMSA to provide balanced and integrated use of nutrient in fertilisation process.

Guidelines of SHM under NMSA provides for setting up of new Soil Testing Labs (STL) and Mobile Soil Testing Laboratories (MSTL) and strengthening existing STLs along with the norms of adopting ten villages by each STL. Audit observed that there was one well-established STL at AD Nagar established in 1972 while three new STLs and two MSTLs were established by the Department in different years[16] for soil

[15] A Soil Health Card is used to assess the current status of soil health and, when used over time, to determine changes in soil health that are affected by land management.

[16] STL at Panisagar and Salema (2017-18) and Udaipur (Not available) while Two MSTL in 2011-12 and 2015-16 respectively.

analysis. It was also observed that only one STL at SARS, AD Nagar was functional. Remaining three STLs[17] could not be put to operation for want of dedicated manpower and installation of lab equipment. On the other hand, out of two, one MSTL purchased in the year 2011-12 at ₹ 41.50 lakh, was lying non-functional since June 2017 due to non-replacement of unserviceable lab equipment (Flame Photometer and Kel Plus) and non-execution of minor repairing works like electrification, air conditioning and fitting/ fixing of equipment in the mobile van. Thus, the Department had only one functional STL and one MSTL for 1,059 villages in the State against the norms of one STL for 10 villages as per guidelines.

Scrutiny of records revealed that against the combined target of 1,09,878 samples, the functional STL at AD Nagar and the MSTL analysed only 81,544 samples during 2013-18 with shortfall of 25.79 *per cent* during that period as shown in **Table 1.4.3**. Regarding SHCs, the Department provided 2,03,213 SHCs to the farmers during 2013-18 against the target of 2,25,978.

Table 1.4.3 Details of testing of soil samples

Year	Target			Achievement			Shortfall (*per cent*)
	Mobile Lab	State Lab	Total	Mobile Lab	State Lab	Total	
2013-14	11000	24000	35000	6677	10869	17546	49.87
2014-15	6094	10459	16553	1693	9549	11242	32.08
2015-16	7250	12750	20000	2949	12078	15027	24.87
2016-17	7100	14725	21825	4550	16415	20965	3.94
2017-18	5650	10850	16500	3137	13627	16764	Nil
Total	**37094**	**72784**	**109878**	**19006**	**62538**	**81544**	**25.79**

Source: *information furnished by the Department*

Audit observed that the reason for shortfall in analysing soil samples was shortages of manpower for soil testing at SARS, AD Nagar and MSTLs. To meet manpower requirement, a proposal for posting of three Agriculture Officers, one Agriculture Assistant and five laboratory attendants/ farm workers was sent (June 2015) to the Directorate by Joint Director, SARS. However, no progress was made in this regard till August 2018. Moreover, failure of the Department to make three STLs and one MSTL operational also restricted the scope for analysis of more soil samples and issue of SHCs.

Scrutiny of the records further revealed that a sum of ₹ 2.06 crore, out of total fund of ₹ 2.98 crore (inclusive of State share: ₹ 0.29 crore), remained unspent due to delay in finalisation of tender for procurement of soil testing equipment for STLs and MSTLs. The Department stated (August 2018) in reply that supply order for machineries and equipment for the MSTL had been issued (April 2018) while equipment, glassware and chemicals were installed (September 2018–November 2018) in STLs at Panisagar and Udaipur.

Non- functioning of three STLs and one MSTL restricted the scope for analysis of soil samples and issue of SHCs.

[17] At Panisagar, Salema and Udaipur

Recommendation No. 3

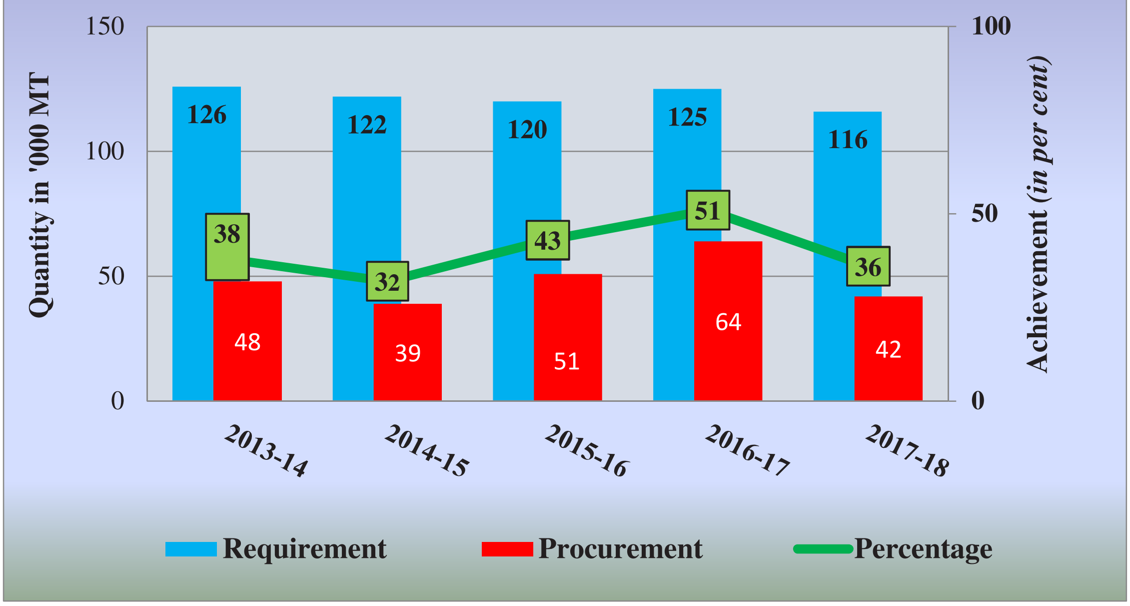
The Department should take expedient steps to operationalise all the existing STLs and MSTLs with required manpower and machineries to optimise the performance of soil testing amenities for better nutrient management based on soil conditions.

(ii) Procurement of fertilisers

Proper input management consists of timely procurement and issue of agricultural inputs economically, efficiently and effectively after assessment of actual requirement. The requirement of fertiliser was estimated by the Department based on the recommended dose of fertilisers for various crops. Three main chemical fertilisers *e.g.* Single Super Phosphate (SSP), Muriate of Potash (MOP) and Urea were procured by the Department and distributed to farmers through sub-seed stores at subsidised rate. Fertilisers were procured by the Department from selected Government agencies through invitation of tender by placement of indents as per requirement from time to time. Apart from Government supply, fertilisers were also brought through private supply chain for retail sale in open markets in the State.

Scrutiny of records revealed that against the total requirement of 6,09,550 MT, the procurement of fertiliser in the State through Government and private channel was only 2,44,414 MT (*i.e.* 40.09 *per cent* of the requirement) during 2013-18. The Department spent ₹ 139.55 crore on procurement of fertilisers from Government agencies during 2013-18 (**Appendix 1.4.6**). Procurement of fertiliser remained far below the actual requirement as depicted in **Chart 1.4.2.**

Chart 1.4.2: Requirement and procurement (in quantity and per cent) of fertiliser



The gap between requirement and procurement of fertiliser exhibited gradual decline during 2013-18 except 2015-16 and 2016-17. There was persistent shortfall in procurement to meet the normative requirement of fertilisers in every year. As a result, there was an imbalance in use of fertiliser in terms of Nitrogen, Phosphorus and Potassium (NPK) in the State. As evident in the 29th report of Standing Committee on Agriculture (16th Lok Sabha, 2015-16) NPK consumption ratio for Tripura was 2.2:1.7:1 which was less than desirable ratio of 4:2:1 in 2014-15.

The Department stated (August 2018) that due to short release of fund from Finance Department; fertilisers could not be procured as per requirement from Government channel. The Department further stated (March 2019) that, fertilisers so procured were fully utilised in each cropping season. This is indicative of the fact the Department failed to ensure availability of fertilisers as per requirement. Thus, the shortfall of around 60 *per cent* in procurement against the requirement (**Appendix 1.4.6**) of fertilisers to the farmers had an adverse effect on production and productivity of the crops.

1.4.9.3 Pesticide management

Pesticides are chemical compounds that are used to kill pests including insects, rodents, fungi and weeds. These are used to kill pests that damage crops. Pesticides are toxic to other organisms including human and need to be used safely.

For ensuring distribution of quality pesticides, the Department established a State Pesticide Testing Laboratory (SPTL) at Agartala in 2006. As per Insecticides Act, 1968 and Insecticides Rules, 1971 of GoI framed thereunder, the Insecticide Inspectors were responsible for collection of samples at different selling points under their jurisdiction and sending the same to the SPTL for testing. Rule 27 (1) of the Insecticide Rules, 1971 stipulates that the Insecticide Inspector should inspect not less than three times in a year, all establishments/ shops selling insecticides within the area of his jurisdiction.

As per directions of the Department, the inspector was required to draw at least one sample from each sale point during each inspection. Further, the Department also fixed the annual target for collection of 400 samples for testing during 2013-17 and 300 samples during 2017-18. Year-wise position of samples collected and tested is shown in the **Table 1.4.4**.

Table 1.4.4: Details of samples collected and tested

(Figures are in numbers and shortfall in per cent)

Year	No. of shops in the State	No. of samples to be collected (No. of shops x 3)	Target fixed by the State Government for testing of samples	No. of Insecticide Inspectors in the State	Details of testing of samples at SPTL		Samples sent outside the State for testing	Shortfall in testing against the target of 400 samples
					Received	Tested		
2013-14	487	1461	400	63	14	13	1	96.5
2014-15	512	1536	400	66	45	37	8	88.75
2015-16	389	1167	400	69	29	15	14	92.75
2016-17	429	1287	400	86	75	22	53	81.25
2017-18	549	1687	300	86	176	55	121	41.34
Total		**7138**	**1900**	**370**	**339**	**142**	**197**	

Source*: Information furnished by the Department*

It could be seen from **Table 1.4.4** that the Department fixed the annual target of collection of samples on the lower side than the number of shops available. The annual target for collection and testing of samples fixed by the Department was 400 during 2013-17 while 300 for 2017-18. Therefore, 1,900 samples were targeted to be collected for testing against the requirement of 7,138 samples.

Though, there was gradual increase in collection and testing of samples yet there was substantial shortfall in each year against the target. Only 339 samples were collected during the five years resulting in shortfall by 82.16 *per cent.* During 2013-18, 24 samples (7.08 *per cent*)*,* out of 339 samples were found sub-standard. Further, out of 339 samples received, only 142 samples (42 *per cent*) could be tested within the State due to non-availability of required equipment[18] and technical manpower[19] in the SPTL and remaining 197 samples (58 *per cent*) were sent to outside the State for testing.

Moreover, it could be seen that all the shops were not inspected even once during the year by the inspectors as per norms stipulated in the rules. Therefore, due to laxity on the part of the inspectors, the target for collection of samples fixed by the Department could not be achieved. Due to less testing of samples, presence of permissible/ accepted level of chemicals remained unevaluated and therefore, the quality of the pesticides sold/ distributed to the farmers was not ensured.

While accepting the fact, the Department stated (August 2018) that necessary action would be taken to ensure quality of pesticides in the state.

Recommendation No.4

The Department should judiciously use agro chemicals and encourage organic farming in the State to maintain soil health for sustainable agriculture and to increase the production.

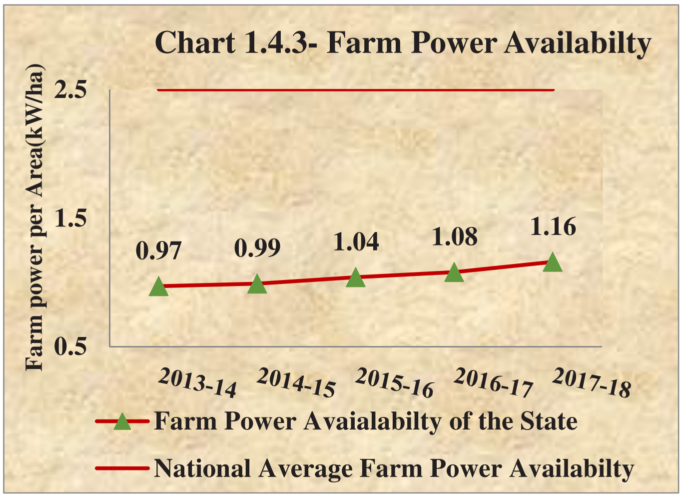
1.4.9.4 Farm power and machineries management

Farm power, an essential input in agricultural operation, refers to the sources of mobile[20] and stationary[21] power utilised in farming work. Farm power availability per unit area *i.e.* kilowatt/ hectare (kW/ha) is one of the widely used indices of the level of farm mechanisation. As involvement of human and animal power has shown a decreasing trend in farming sector, to substitute them, farm mechanisation is the key factor for timely and cost effective farm operation, increasing crop intensity and improving farm power sources of the State.

[18] Spectrophotometer, PH meter, Sieve shakers, *etc*.
[19] Instrument Technician, Lab Technician and Scientific Assistant.
[20] Source of mobile farm power is derived from tractor, power tillers including human & animal resources used in tilling operation and self-propelled machineries (*e.g*. combines, dozers, reapers & sprayers)
[21] Source of stationery farm power is obtained from oil engines and electrical motors (*e.g*. pump sets, threshers & sprayers) used in irrigation, threshing, post-harvest operation and other stationary operations

The Department implemented farm mechanisation by incurring expenditure of ₹ 20.60 crore on subsidy to the farmers for distribution of different farm implements under National Food Security Mission (NFSM), National Mission on Oil Seeds and Oil Palm (NMOOP) and Rashtriya Krishi Vikas Yojana (RKVY) schemes during 2013-18. Scrutiny of records revealed that distribution of farm implements like knapsack sprayers, power tillers, manual paddy threshers and multi-crop threshers had exceeded targets while power paddy thresher, manual weeders, sprinkler set, mobile rain gun were not provided to the farmers as per target set by the Department during 2013-18. Target for distribution of harvesting equipment (*e.g.* self-propelled-vertical conveyor reaper, shrub master and reaper binder, *etc.*) was neither fixed by the Department nor were any achievement recorded in this regard in any financial year (**Appendix 1.4.7**).

Therefore, distribution of farm implements by the Department was limited to few machines and equipment due to which farm power availability per ha exhibited slow progression from 0.97 kW/ha to 1.16 kW/ha during 2013-18 and it remained lower than the national average of farm power availability of 2.5 kW/ha. This is the one of the reasons for stagnation in the productivity of major crops **(Chart 1.4.3).**



In order to increase the farm power availability in the State, a State level task force constituted in 2015-16 under the chairmanship of the Principal Secretary, Agriculture Department, Government of Tripura recommended to provide subsidy up to 90 *per cent* for machineries like transplanter, harvester, power tillers, drum seeders, power sprayers, *etc*. The task force also recommended special thrust on use of mini tractors (*i.e*. 10 hp to 20 hp). The recommendations of the State level task force has not been adopted as of August 2018.

The Department stated (August 2018) that farm machineries were distributed among the farmers based on the availability of fund, approved suppliers of the equipment, list of selected beneficiaries and demand among the farmers. The Department further stated that demand for tractors is likely to improve in the coming years due to increase in subsidy for the same by GoI. Regarding low farm power availability in the State, the Department stated in their reply that small and fragmented agricultural land reduced the scope of use of big machines like harvesters in the farmer's field.

1.4.9.5 Micro irrigation scheme

Water is one of the most critical inputs for agriculture. To achieve self-sufficiency in production of food grains, the Department took initiative to cover marginal arable and slope land under Micro Irrigation by installing Small Bore Deep Tube Wells (SBDTWs) by incurring expenditure/ liability of ₹ 132.47 crore[22] during 2013-18 under schemes like Special Plan Assistance (SPA), NFSM, Rural Infrastructure Development Fund (RIDF) and Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). The User Committee[23] is responsible for overseeing the implementation of the work under these schemes.

The Department targeted installation of 5,336 SBDTWs during 2013-18 with a view to covering 10,672 ha[24] under irrigation. Analysis of records revealed that against the target of 5,336 projects, 2,342 SBDTWs (43.89 *per cent*) were commissioned. Out of commissioned SBDTWs, 2,293 SBDTWs were put to operation leaving 49 SBDTWs non-functional even after commissioning due to lack of maintenance and follow up[25] by the respective User Committees. Installation of the remaining 2,994 SBDTWs [26] was incomplete and at different stages as of July 2018 (**Appendix 1.4.8**).

In reply to audit, the Department stated (August 2018) that against 2,994 SBDTWs, 1,142 would be completed within time frame, work of 906 SBDTWs were not taken up either due to non-availability of site or paucity of funds while remaining 946 SBDTWs could not be commissioned due to non-availability of electric service connection. Further, it was stated that 49 SBDTWs were lying non-functional after commissioning due to disconnection of power supply due to non-payment of electric bills by the User Committees or absence of proper maintenance.

The reply was not acceptable. As per work order, the SBDTW was required to be completed within the 150 days of issue of the work order. Thus, lack of follow up, improper planning and site selection deprived the farmers of an area of 5,988 ha (2,994 x 2 ha) of irrigation benefits.

For early completion of the SBDTWs, it was assured during the Exit Conference that the matter would be taken up with the Rural Development Department for providing funds under MGNREGS.

Recommendation No. 5

i. *The Department should ensure availability of fertilisers, seeds, distribution of farm machineries and completion of micro irrigation projects.*

---

22 Expenditure: ₹ 83.08 crore *plus* Liability: ₹ 49.39 crore

23 All the benefited farmers are the members of the User Committee. One of them or elected chairman/ vice-chairman/ member of concerned Gram Panchayat (GP)/ Village Committee (VC) may be selected as a chairman of the committee. Besides, Village Level Worker (VLW)/ Agri-assistant of the concerned GP/ VC is the Member Secretary and one member of the committee is to be selected as cashier/ treasurer. The income of the user committees generated from the monthly contribution of the members as decided by the committee in its resolution

24 Two ha land to be covered by each SBDTW. 10,672 ha land to be covered by 5,336 SBDTWs

25 Maintenance and management of the scheme is to be looked after by the User Committee under the technical guidance of Junior Engineer, Agri or Executive Engineer, Agri. For over all monitoring of the schemes and utilisation of water through SBDTW is to be carried out by the User Committee with the help of Agri Sector Officer or Superintendent Agriculture as per necessity

26 Sinking of SBDTW in progress: 1,142, lack of power connection: 946, works not started yet: 906

ii. *Necessary administrative action may be initiated against the Pesticides Inspectors who failed to discharge their duties of Inspection of shops as per the targets assigned to them.*

1.4.10 Programme management

Impact of implementation of the flagship schemes of Government of India *e.g.* Rashtriya Krishi Vikas Yojana, National Food Security Mission and National Mission on Oilseeds and Oil Palm on production level of the State during 2013-18 is discussed in **Paragraphs 1.4.10.1** to **1.4.10.3**.

1.4.10.1 Rashtriya Krishi Vikas Yojana

The Rashtriya Krishi Vikas Yojana (RKVY) was launched by GoI in 2007-08. The scheme was fully funded by GoI. The State Government had introduced the project namely, System of Rice Intensification (SRI) under RKVY for vertical increase in production (*i.e.* yield) of food grains.

(i) System of Rice Intensification

Scrutiny of records of 10 Superintendents of Agriculture (SAs) selected for PA revealed that:

a. for popularisation of SRI cultivation, assistance of ₹ 3,918 per ha (kind assistance on fertiliser component *plus* cash assistance for preparation of nursery bed and intercultural operation) was to be provided to the beneficiaries/ farmers selected by PRIs for popularisation of SRI cultivation where six basic principles[27] were to be followed. Rate for kind and cash assistances was fixed by the Department every year. Audit observed that the SAs, Bishalgarh and Dukli did not follow the prescribed assistance norms and resultantly, cash assistance of ₹ 2.07 crore[28] during 2013-18 was not provided to the farmers belonging to the area of 14,950.55 ha.

b. the Department decided (July 2015) to promote hybrid paddy cultivation through SRI with financial assistance of ₹ 7,500 per ha (in-kind assistance of ₹ 4,764 per ha *plus* cash assistance of ₹ 2,736 per ha). Details of the assistance provided in 10 test checked SAs are shown in **Table 1.4.5**.

Table 1.4.5: Assistance provided for promotion of hybrid paddy cultivation through SRI

(Area covered in ha, Assistance in crore)

Year	Details of in-Kind Assistance provided					Details of Cash Assistance provided				
	Area	Normative @₹ 4764/ha	Actual	Shortfall	Per cent	Area	Normative @₹ 2736/ha	Actual	Shortfall	Per cent
2015-16	21,726.94	10.35	7.68	2.67	25.80	21,726.94	5.94	5.49	0.45	7.58
2016-17	19,016.19	9.06	7.10	1.96	21.63	16,034.95	4.39	3.99	0.40	9.11
2017-18	21,266.50	10.13	5.24	4.89	48.27	20,166.5	5.52	4.30	1.22	22.10
Total	**62,009.63**	**29.54**	**20.02**	**9.52**	**32.23**	**57,928.39**	**15.85**	**13.78**	**2.07**	**13.06**

Source: *Information furnished by SAs*

27 Single seeded transplanting, age of plant, plant to plant spacing, row to row spacing, watering and timely weeding, *etc*.

28 2013-14: ₹ 0.66 crore (5332.71 ha x ₹ 1238/ha), 2014-15: ₹ 0.25 crore (2037.30 ha x ₹ 1238/ha), 2015-16: ₹ 0.54 crore (3531.78 ha x ₹ 1521/ha), 2016-17: ₹ 0.60 crore (3933.86 ha x ₹ 1535/ha) and 2017-18: ₹ 0.02 crore (114.90 ha x ₹ 1535/ha)

It can be seen from **Table 1.4.5** that there was shortfall in assistance under kind component (valued ₹ 9.52 crore) to the extent of 26 *per cent*, 22 *per cent* and 48 *per cent* respectively during the last three years under kind assistance. Further, there was overall shortfall of 13.06 *per cent* in cash component, which corresponded to short assistance of ₹ 2.07 crore during 2015-18. Therefore, farmers having an area of 4,081.24 ha[29] though provided assistance in-kind, were not provided cash assistance during 2015-18.

In reply, the SAs, Bishalgarh and Dukli stated (November 2018) that non-availability of fund was one of the reasons for providing less cash assistance. Besides, the cash assistance were also not provided to those farmers who did not follow six basic principles. However, as per records, it was the responsibility of the Department to provide technical guidance to the farmers to follow six basic principles during cultivation under SRI.

Further, SA, Bishalgarh also stated that online Identity Document (ID) not being created for Direct Benefit Transfer (DBT) was also one of the reasons for not providing the cash assistance. This part of the reply is not acceptable as the creation of ID for DBT was the responsibility of the Department.

It was, however, assured during the Exit Conference that the Department would take necessary action in implementation of six basic principles of System of Rice Intensification so that productivity of rice in the State would increase.

(ii) Infrastructure and assets

Implementation of two major infrastructural projects under RKVY namely, 'Mini Modern Rice Mill' and 'Mini bio-fertiliser production centre', was covered by audit as detailed below:

(a) Mini Modern Rice Mill

In conventional method of milling, 10-15 *per cent* of rice *i.e.* 75,000-80,000 Metric Tonne (MT) (approx.) of rice is lost every year in Tripura. To reduce loss of rice in conventional milling process and to popularise the HYV rice having long and medium slender grain, the Department decided (2013-14) to establish 10 Mini Modern Rice Mills with capacity of two MT paddy per hour each in different rice growing belts of the State having satisfactory production of paddy every year. The Department considered two MT per hour processing capacity for each rice mill so that the husk generated during the milling process would be enough to meet the requirement of fuel for running the boiler machine to generate steam for parboiling and drying process in the plant. Besides, the plant with two MT per hour capacity would also counter the problem of processing losses and ensure optimal yield in processing as per Food Corporation of India (FCI)'s guidelines.

Accordingly, the expression of interest (EoI) was invited (February 2014) for establishment of 10 Rice Mills. But considering the huge one-time cost, the

[29] 62,009.63 ha - 57,928.39 ha

Department later decided (May 2014) to set up only two rice mills of two MT capacity each *i.e.* one Parboiling Rice Mill at Udaipur and one Raw Rice Mill at Kumarghat on turnkey basis in the 1st phase. In response to EoI, two firms submitted their tenders. The Department selected Milltec Machinery Private Limited (a Bangalore based firm) among the two firms, for supply, erection and commissioning of machineries and equipment for two rice mills at a total cost of ₹ 4.82 crore (including one month's operation and maintenance cost). Work order was issued (August 2014) in favour of the agency with the stipulation to complete the work within 120 days. Construction of milling shed was to be taken up departmentally as per the condition of the EOI.

Construction of rice mill at Kumarghat was not taken up by the agency due to non-allotment of proposed land by Sub-Divisional Magistrate concerned. On the other hand, rice mill at Udaipur though completed (August 2016) at a cost of ₹ 3.21 crore (agency's payment up to April 2016 of ₹ 2.79 crore *plus* departmental expenditure of ₹ 42.24 lakh on construction of milling shed) could not be put to operation as the Department could not arrange minimum requirement of 32 MT paddy for two batches (*i.e.* 2 MT paddy per hour *multiplied* by 8 hours *i.e.*16 MT per batch) for full loaded trial run of parboiling, drying and milling section to ensure optimal milling output of the plant. Resultantly, the plant remained idle for eight months without any productive usage and ultimately the trial run was conducted (May 2017) by the agency with 4.4 MT paddy provided by the Department which was only 13.75 *per cent* of the minimum requirement of 32 MT. The project was finally handed over by the agency to the Department in July 2017. However, failing to arrange requisite raw input of 16 MT paddy per day at the latter stage, the project could not be made operational and plant remained idle (August 2018). The Department planned to establish Mini Modern Rice Mills in the rice growing belts of the State to ensure uninterrupted supply of paddy. However, as majority of farmers in Tripura are holding small land, it was not possible to obtain the required paddy to feed up the plant on daily basis. Besides the Department had not adopted any policy to procure paddy from farmers directly.

On this being pointed out, the Department stated (August 2018) that effort had been made by the Department to lease out the plant on rental basis by inviting tender twice but no party had shown interest. Thereafter, to make the project more appealing to potential bidders, the Department had estimated ₹ 1.12 crore for creation of some additional infrastructures in the plant like installation of Colour Sortex machine, Diesel Generator sets, Pre-cleaner, weigh bridge, *etc.* which had not been incorporated in the scope of work. However, Administrative Approval and Technical Sanction were not accorded by the competent authority (August 2018).

Thus, improper feasibility study with regard to demand and non-availability of input (paddy) resulted in idle expenditure of ₹ 3.21 crore on construction of rice mill at Udaipur along with the liability of ₹ 1.12 crore to be borne by the Department at later stage on additional works of the plant for its utilisation. Therefore, the aim of the

Department to minimise the loss of rice in conventional milling process remained unattained even after lapse of more than four years after the decision was taken to establish Mini Modern Rice Mills.

(b) Mini bio-fertiliser production centre

Bio- fertiliser such as Rhizobium, Azatobactor, Azospirillium and Potash Mobilising Microorganism (PSB), helps in plant growth, protection and nutrition. They are widely accepted as low cost supplements to chemical fertilisers and environment friendly for maintaining soil health for sustainable agriculture.

In order to popularise the use of bio-fertiliser, the Department decided in 2007-08 to establish mini bio-fertiliser production centres at 10 locations[30] with annual production capacity of 50 MT (5 MT each) and allocated ₹ 5.01 crore[31] for this purpose. The centres were set up at a cost of ₹ 4.93 crore which included ₹ 3.18 crore for civil and electrical works and ₹ 1.75 crore for plant and machineries.

Scrutiny of records revealed that the construction of the buildings for the centres was completed by 2010-11 (except at Kalacherra, which was completed in 2013-14) but the plant and machineries were supplied in 2016-17 only as there was delay in tendering process and supply of plant and equipment due to imprudent decision of the Department. Thus, the centres were handed over in June-July 2016 to the respective SAs. Further, out of the 10 centres, only five centres (at Amarpur, Bagafa, Teliamura, Jirania and Mohanbhog) were put to operation and could produce only eight *per cent* (2.05 MT) of annual capacity of 25 MT (5 MT each). Production in remaining five centres could not be started (September 2018). The low production in the five centres and non-production in the remaining centres were attributed mainly to non-allocation of separate fund to procure raw materials, non-posting of dedicated staff and electrical load problem.

Therefore, due to failure to make the five production centres operational and underutilisation of remaining centres, an investment of ₹ 4.93 crore largely became unfruitful and intended benefits for which the centres were established, did not accrue.

1.4.10.2 National Food Security Mission

National Food Security Mission (NFSM) was launched in 2007 with the target of additional production of 25 million MT of food grains comprising rice, wheat, pulses and coarse cereals by the end of twelfth plan at national level. The scheme provides for cluster demonstration farming in 10 ha area for hilly and north eastern states. As per the information provided by the Department, NFSM was implemented in the State during 2013-14 to 2017-18 and out of ₹ 105.92 crore released by GoI during 2013-18, an expenditure of ₹ 104.26 crore was incurred during the period.

---

[30] (i) Amarpur, (ii) Bagafa, (iii) Bishalgarh, (iv) Jirania, (v) Kumarghat, (vi) Mohanbhog, (vii) Teliamura, (viii) Rajnagar, (ix) Satchand and (x) Kalacherra, Salema

[31] RKVY: ₹ 3.03 crore and State Plan: ₹ 1.98 crore

It was noticed from the progress reports furnished by the Mission Director[32], NFSM to GoI that the State had reported 100 *per cent* achievement (both physically and financially) during 2013-18 in the implementation of the scheme. But test check of records for the period 2013-18 maintained by four DDAs[33] revealed significant shortfall in implementation of various interventions in respect of rice, pulses and coarse cereals as shown in **Table 1.4.6**.

Table 1.4.6: Target and achievement in implementation of interventions under NFSM

Sl. No.	Interventions implemented in four District	Target (T), Achievements(A) and shortfall in *per cent* (S) during 2013-18								
		Rice			Pulses			Coarse Cereal		
		T	A	S	T	A	S	T	A	S
1.	Conducting cluster demonstrations (area covered in ha)	24422	23019	5.74	1846	1377	25.41	-	-	-
2.	Distribution of seeds (in ql.)	52433	32911	37.23	3933	2085	46.99	1089	340	68.78
3.	Distribution of micronutrients (area covered in ha)	49708	35415	28.75	1936	530	72.62	-	-	-
4.	Distribution of liming (in ha)	14502	8102	44.13	2619	490	81.29	-	-	-
5.	Distribution of bio-fertiliser (in ha)	-	-	-	2841	939	66.95	-	-	-
6.	Distribution of Plant Protection Chemical (PPC) (in ha)	18969	6680	64.78	3172	743	76.58	-	-	-
7.	Distribution of farm implements (in nos.)	19182	4430	76.91	1757	428	75.64	-	-	-
8.	Demonstration on Improved Technology (in ha)	-	-	-	-	-	-	1729	924	46.56

Source: *progress reports furnished by DDAs to the Mission Director*

It can be seen from **Table 1.4.6** that in case of rice, there was shortfall to the extent of 37 *per cent* in distribution of seeds, 29 *per cent* in distribution of micronutrients, 44 *per cent* in distribution of liming, 65 *per cent* in distribution of Plant Protection Chemical (PPC) and 77 *per cent* shortfall in distribution of farm implements during 2013-18. In case of pulses, considerable shortfall registered in distribution of micronutrients (73 *per cent*), distribution of liming (81 *per cent*), distribution of bio-fertiliser (67 *per cent*), Plant Protection Chemical (PPC) (77 *per cent*) and distribution of farm implement (76 *per cent*) while distribution of seeds exhibited moderate achievement of 53 *per cent*. Achievement in respect of conducting cluster demonstrations in case of rice was satisfactory (95 *per cent*) while it was 75 *per cent* in case of pulses. For coarse cereal, two interventions namely distribution of seeds and demonstration of improved technology exhibit shortfall of 69 *per cent* and 47 *per cent* respectively. Therefore, it was evident that the progress of implementation reported to GoI did not reflect the true picture of the programme implementation and its achievement.

The matter was referred (August 2018) to the Department and reply is awaited (November 2018).

32 Joint Director, SARS discharges duty of Mission Directorate, NFSM
33 DDA West, DDA North, DDA South and DDA Sepahijala

1.4.10.3 National Mission on Oil Seeds and Oil Palm

For encouraging cultivation of oilseeds including oil palm and Tree Borne Oilseeds (TBOs), National Mission on Oilseeds and Oil Palm (NMOOP), a Centrally Sponsored Scheme (CSS) was launched by GoI in 2014-15. The Scheme comprised of three Mini Missions (MMs) namely MM-I for Oilseeds, MM-II for Oil Palm and MM-III for TBOs. The Department started Mini Mission I and III in the State from 2014-15 while they did not implement MM-II.

Under the Mini Mission-I, the target was to achieve 1,328 kg/ha productivity of oil seeds, from the prevailing average productivity of 1,081 kg/ha at national level by the end of twelfth plan (2012-17) *i.e.* to increase productivity by 247 kg/ha (average annual growth rate of productivity being 4.57 *per cent*). To achieve this objective, financial assistance was provided for production and distribution of seeds, plant protection equipment, and distribution of micronutrients, bio-fertilisers, bio-pesticides, seed storage bins and transfer of technology through block demonstrations. The Department formulated strategies for increasing production and productivity of oilseeds in the State through above-mentioned interventions under NMOOP.

Scrutiny of records revealed the following:

a. there was shortfall to the extent of 30 *per cent* in block demonstration, 86 *per cent in* distribution of production inputs, 78 *per cent* in distribution of plant protection equipment (PPE) and 65 *per cent* in seed storage bins during 2014-18 in four DDAs selected for PA (**Appendix 1.4.9**).
b. during 2014-18, there was shortfall in production of oil seeds ranging from 36 *per cent* (2015-16) to 46 *per cent* (2014-15) and shortfall in productivity in oil seeds ranged from 11 *per cent* (2014-15) to 38 *per cent* (2015-16). However, Audit_observed that the targeted production was not achieved due to non-achievement of coverage of targeted area[34] by the Department during 2014-18.

Though the productivity of oilseeds increased from 758 kg/ha (2013-14) to 814 kg/ha (2017-18) during the year 2014-18, the fact however, remained that due to non-achievement of targeted interventions, the Department could not achieve the targeted national average *i.e.* 1,328 kg/ha even after spending ₹ 10.02 crore.

Recommendation No. 6

i. The Department should ensure efficient use of all created infrastructures like Soil Testing Labs, SBDTWs, Mini Modern Rice Mills, and mini bio-fertiliser production centres to their fullest capacity.

ii. The Department should ensure that SRI scheme is implemented as per the prescribed norms and interventions under NFSM and NMOOP schemes are implemented as per target to attain self-reliance.

[34] Targeted area- 72,872 ha, achieved area -53,612 ha

1.4.11 Production of major crops

The Department aimed at enhancing production of food grains during twelfth plan by increasing the productivity to meet the requirement of the State.

Agricultural productivity requires seeds that enable crops to withstand environmental and biological stresses, crop protection solutions, modern irrigation practices, fertilisers, farm mechanisation and plant breeding[35], *etc.* The requirement of food grains *vis-a-vis* actual production and productivity during 2013-18 in the State are shown in **Table 1.4.7**.

Table 1.4.7: Details of production, productivity and coverage of area under major crops

Year	Requirement of food grains *(in lakh MT)*	Area covered *(in lakh ha)*	Actual production of food grains *(in lakh MT)*	Shortfall *(in lakh MT)*	Productivity MT/ha
2013-14	8.66	2.71	7.27	1.39	2.68
2014-15	8.79	2.74	7.62	1.17	2.78
2015-16	8.92	3.01	8.23	0.69	2.73
2016-17	9.05	3.17	8.53	0.52	2.68
2017-18	9.18	3.19	8.54	0.64	2.67

Source*: Departmental records*

It can be seen from **Table 1.4.7** that the gap between the requirement and production of food grains narrowed during 2013-18. However, productivity of food grains remained almost stagnant and ranged from 2.67 MT (2017-18) to 2.78 MT (2014-15). This implied that though the production had increased, it had been more on account of expansion of area under cultivation rather than increase in productivity, thereby raising questions on the effectiveness of the various schemes being implemented to improve productivity.

As a special drive, the Department planned for additional production of 0.82 lakh MT food grains in 2017-18 over the production of 2016-17 by giving emphasis to promotion of hybrid seeds, SRI technology, soil amelioration and bringing additional areas under cultivation. Scrutiny of records, however, revealed that the Department did not achieve the additional target mainly due to shortfall in procurement of fertiliser, production of seeds and deficiencies in programme implementation like NFSM and RKVY.

Audit further noticed that to meet the demand of increasing population, the State depended on the food grain procured from the others states, which implied that the State did not achieve self-reliance on food grain production.

In reply to audit, the Department stated (October 2018) that the production and productivity of the food grains was higher as compared to national average. However, the Department remained silent on various issues raised by audit *e.g.* the gap between requirement and production of food grains, additional targets set by the

[35] Plant breeding is the science of optimising a plant's genetic make up to produce desired characteristics. Through plant breeding techniques, a farmer can produce higher yielding crops that are better in quality, tolerant to environmental pressures, resistant to pests & diseases and tolerant to insecticides & herbicides.

Department and non-achievement of self-sufficiency, which was targeted to be achieved by the end of the twelfth five-year plan. Resultantly, self-sufficiency could not be assured in the State.

A case study regarding self-sufficiency in case of rice (staple food of the people of the State) is given below:

Case Study

As per information furnished by the Department, the State had an actual production of rice of 38.78 lakh MT against the projected requirement of 41.04 lakh MT (**Appendix 1.4.10**) showing a deficit of 2.26 lakh MT during 2013-18, which was 5.5 *per cent* below the required level**.** However**,** information collected by audit from Food & Civil Supplies and Consumer Affairs Department, Government of Tripura showed that 15.08 lakh MT rice was procured by the State with an average of three lakh MT each year from other states through FCI for dispersal at the Fair Price Shops under Public Distribution System (PDS) during 2013-18 as shown in **Table 1.4.8.**

Table 1.4.8: Details of requirement, production and procurement of rice through PDS

(in lakh MT)

Year	Projected Requirement of Rice	Actual Production of Rice in the State	Rice procured for PDS supply
2013-14	7.97	7.11	3.30
2014-15	8.09	7.47	3.36
2015-16	8.21	7.95	2.98
2016-17	8.33	8.15	2.82
2017-18	8.45	8.10	2.62
Total	**41.04**	**38.78**	**15.08**

It can be seen from **Table 1.4.8** that even after meeting 94.50 *per cent* projected requirement of rice through domestic production, the State was still dependent on PDS to ensure stable supply of rice to meet the demand of increasing population.

Thus, the State was yet to achieve self-reliance in production of rice even at the end of 2017-18.

During the Exit Conference, the Department agreed to provide special thrust for increasing production, productivity and profitability of the farmers in order to increase food grains' production to meet the requirement of present population of the State.

Recommendation No. 7

In order to increase food grains' production to meet the requirement of the present population of the State, the Department should give special thrust for increasing production, productivity and profitability of the farmers.

1.4.12 Agricultural Insurance Schemes

To insure the farming community against various risks like natural calamities, pest and diseases that led to damage of crops, National Agricultural Insurance Scheme (NAIS) was launched by GoI in 1999-2000. From Kharif seasons in 2016-17, it was replaced by Pradhan Mantri Fasal Bima Yojana (PMFBY) for mitigating the financial loss suffered by farmers. Government of Tripura (GoT) adopted NAIS since 2001-02. Under this, the Department is responsible for issuing season wise notification for crops and areas covered for insurance benefits. Different Insurance Companies[36] were engaged during 2013-18. The NAIS/ PMFBY was compulsory for loanee farmers who were availing loans from financial institutions (FIs)/ banks for notified crops under notified areas and optional for non-loanee. The claims were calculated on the basis of shortfall in the current season yield obtained from Crop Cutting Experiments[37] (CCE) conducted by the State Government as compared to threshold yield[38] and settled through FIs.

Further, NAIS/ PMFBY Scheme Guidelines require adequate publicity of the schemes through electronic and print media, farmers' fairs and exhibitions including SMS messages, short films and documentaries to be shown in all the villages of the notified districts/ areas. The Department in consultation with the insurance companies should work out appropriate plan for adequate awareness and publicity.

Scrutiny of records revealed the followings deficiencies in implementation of NAIS/ PMFBY in the State during the period 2013-18:

a. the coverage of farmers under NAIS/ PMFBY during 2013-18 was very poor and ranged between 0.30 *per cent* (2015-16) to 0.78 *per cent* (2016-17) for Kharif and 0.11 *per cent* (2014-15) to 3.35 *per cent* (2016-17) for Rabi in the State. No farmer was covered during 2013-15 for Kharif and 2013-14 for Rabi **(Appendix 1.4.11)**.

b. paddy crop was only notified by the Department during 2013-18 and pulses and oilseeds were not notified. Resultantly, farmers growing pulses and oilseeds could not avail insurance benefit.

c. the Department did not fix any targets for organising awareness camps/ seminars and no fund was earmarked by the Department for the awareness camp. In case of nine SAs, out of 10 SAs covered under audit, no awareness camps/ seminars were organised during 2013-16 and only 48 awareness camps were organised during 2016-18.

d. During Rabi season (2016-17), 692 farmers were eligible for payment of insurance claims. However, claims of only 40 farmers were settled by the insurance company and claims of 652 farmers involving an amount of ₹ 37 lakh were not settled. The Department took up the matter with the GoI in January

---

[36] Agriculture Insurance Company of India Limited (AICIL) was engaged for insurance of Rabi and Kharif crops up to 2015-16. In 2016-17, only Rabi crops were covered by the AICIL while Reliance General Insurance Company was engaged for Kharif. Since 2017-18, Royal Sundaram General Insurance Company Ltd (RSGIC) was the insurer under the scheme in the State

[37] CCE is a scientific mechanism from which the yield estimation is obtained through multiple stage stratified sampling

[38] Threshold Yield for a crop in an insurance unit shall be the moving average based on past three years' average yield in case of rice and wheat and five years' average yield in case of other crops multiplied by the level indemnity

2018 and with the AICIL in August 2018. Therefore, delay in settlement in claims deprived the farmers of the intended benefits.

Audit observed that inadequate publicity of the schemes, inadequate support of the insurance company and absence of proactive involvement of the banks were reasons for low coverage of farmers under the schemes.

The Department accepted the audit observations.

Interview of 106 farmers conducted (November 2018) by audit revealed that 69 farmers had insured their crops and out of 69 farmers, claim of 52 farmers was settled.

Further, out of the 106 farmers interviewed (November 2018) by Audit, 41 farmers had not attended any awareness camp/ seminar and 32 farmers stated that they were not aware of the benefits of the insurance scheme. All the farmers stated that there was no office of the crop insurance company in their areas.

Therefore, lack of efforts on the part of the Department to inform farmers about the benefits of insurance schemes and non-availability of logistic support from the insurance companies resulted in less coverage of farmers and intended objective of the scheme to stabilise farm income remained unachieved.

Recommendation No. 8

The Department should emphasise on publicity with adequate logistic support to encourage farmers to adopt crop insurance. Besides, the Department should ensure the all stake holders responsible for implementation of the schemes adhere to the time line in settlement of claims.

1.4.13 Agricultural markets and Farmer Friendly Reforms

The Tripura State Agriculture Market Board under the administrative control of Agriculture Department was formed (August 1986) by the State Government after amendment of the Tripura Agricultural Produce Markets (TAPM) Act, 1980 in 1983 to undertake adequate infrastructural development of agricultural markets and promote farmer friendly marketing reforms in the State through Agricultural Produce Market Committees (APMCs). GoI also took major steps to reform marketing system by implementation of APMC Act, 2003 and setting up a National Agricultural Market (NAM) in all states. APMCs were formed to manage all the Government regulated markets of the State within the framework of the TAPM Act, 1980.

1.4.13.1 Poor functioning of Market Board and APMCs

Scrutiny of records revealed the following deficiencies in functioning of Market Board and APMCs:

a. Three APMCs at Kalsi, Mohanpur and Sonamura, out of 16 APMCs[39], did not maintain mandatory records *viz.* cash book, annual audited accounts and collection register. Besides, APMC at Sonamura, the regulated market appeared

[39] Out of 21 APMCs in Tripura, 16 APMCs had furnished records/ information to audit

quite inactive as the supervision and control of the market was fully transferred to Sonamura Nagar Panchayat in the year 1996. However, the Department could not furnish copy of approval of such transfer to the Nagar Panchayat. As a result, the revenue so collected from the market was not received by the Department rather it went to the Nagar Panchayat since 1996.

b. Mandatory subscriptions (monthly basis) of 10 *per cent* of the income of APMCs (*e.g*. collection of stall rent, market fees, *etc.*) is required to be contributed to the Board Fund as per resolution taken up (June 2004) by the Department. Scrutiny of records of 16 APMCs revealed that five APMCs[40] did not contribute their mandatory subscriptions and another four APMCs[41] persistently contributed the least (less than ₹ 0.20 lakh average annual contribution) during 2013-18. It was also observed that number of APMCs could not be increased during 2013-18. As market surveys were not conducted as envisaged under Rule 52 of TAPM Rules, the Market Board could not explore the full potential of the existing regulated markets and create new regulated markets to enhance the earning of the APMCs/ market board.

c. As per standing instruction issued by the State Government (May 1984), a mandatory contribution of 20 *per cent* of the income of the market committee of Panchayat and municipal markets developed by the Department is required to be transferred into Board Fund. The Department executed 75 developmental works during 2013-18 with the total capital investment of ₹ 19 crore in respect of different panchayat and municipal markets of the State. However, audit observed that Market Board had not entered into agreements with any market committee of the markets concerned to realise their contributions from respective market committees and to supplement the resource allocation by the Department for construction of these panchayat and municipal markets.

d. Income generation of the Market Board was very low with average annual earning of merely ₹ 3.04 lakh[42] out of the contributions received from all APMCs during 2013-17. The Board could not attend to the major developmental activities as mandated by the APMC Act, 2003.

e. Value added services like primary/ secondary grading facilities and scientific packaging technology for any processed/ semi-processed agri-product (except spices) were not available in the State.

f. There was lack of basic infrastructural facilities[43] like storage godowns, water and electricity connection, internal/ approach road and market shed/ stalls, *etc.* (**Appendices 1.4.12 & 1.4.13**). Besides, physical verification of some of the newly developed as well as existing markets revealed mis-utilisation, under-

[40] at Sonamura, Gandacherra, Silacherri, Mohanpur and Kalsi

[41] at Chowmanu, Champaknagar, Garjee: and Nutanbazar

[42] 2013-14:₹ 2.30 lakh;2014-15:₹ 2.34 lakh;2015-16: ₹ 3.42 lakh;2016-17: ₹ 4.13lakh

[43] As per the TAPM (2[nd] Amendment) Act, 2007 read with agenda note of Conference of State Ministers on Marketing Infrastructure held at Bengaluru on 19 November 2004 and communicated to the Agriculture Department, Government of Tripura on 22 November 2004

utilisation and non-utilisation of various market infrastructures (**Appendix 1.4.14**). However, audit observed that the Department had not taken up any market survey to look into the matter of absence of basic infrastructure and mis-utilisation of existing infrastructure in the rural and regulated markets.

1.4.13.2 Implementation of APMC Act, 2003 and e-NAM

a. Ministry of Agriculture, GoI formulated a model Agricultural Produce Market Committee (APMC) Act, 2003 and circulated the same in 2003 to all States/ UTs. Accordingly, State adopted some specific marketing reforms under APMC Act, 2003 after amendment of the TAPM Act, 1980 in April 2007. Audit observed that even after lapse of more than 10 years from the enforcement of the TAPM (2nd Amendment) Act, 2007, no mechanism was devised by the Department to promote all the adopted reforms like direct marketing, contract farming, special commodity market and establishment of private/ cooperative market state-wide as mandated by the APMC Act, 2003.

b. Operational Guidelines for National Agricultural Market (NAM) through Agri-tech Infrastructure Fund (ATIF) (launched in 2015-16 by GoI) mandated accomplishment of pre-requirements like effecting single licence system across the State, single point levy of market fee except fruits and vegetables and promotion of electronic auction/ e-trading for providing an appropriate common e-market platform to the APMCs throughout the country. After meeting the pre-requirements by the APMCs, the State Government would submit the Detail Project Reports (DPR) for one time grant (₹ 30 lakh per market) under ATIF for integration of markets with e-NAM platform.

Scrutiny of records revealed that the State Government did not implement the e-NAM as of August 2018.

On this being pointed out, the Department stated (June 2018) that in Tripura, amendment to the existing TAPM Act, 1980 for incorporating provision of e-NAM was under process of finalisation/ vetting by State Law Department and that other prerequisites would be implemented shortly. Meanwhile, 585 markets across 18 other states in India were already been taken up under e-NAM scheme by the GoI as on March 2018.

Therefore, even after involvement of 51 *per cent* of total working population of the State in agricultural sector, the Department neither could evolve potential market for any agri-produce on a commercial basis nor was any effort made to streamline private investments and value added services in the marketing sector.

Limited marketing avenues and small marketable surplus induced marginal and small farmers to sell their produce to local commissioned agents, which inflates consumer price but discourages better return to farmers. In this backdrop, the Department should improve under-performing regulated markets, by reviving the concerned APMCs, on the one hand, and explore the unorganised rural markets by promoting marketing reforms with adequate infrastructure closer to the farmers' field, on the other hand.

While accepting the audit observations on poor implementation of APMC Act, 2003 and non-implementation e-NAM scheme, it was assured during the Exit Conference that APMC Act, 2003 would be enforced strictly and e-NAM scheme would also be implemented, for improving agriculture marketing in the State.

1.4.14 Agricultural education, training and extension activities

Considering diversity in soil, climate, crops and adoption pattern in the State, regular agricultural education, research and extension up to grass roots is essential for proper sustenance. Agricultural education, extension services and training mainly aimed at transferring improved agriculture technology from research station to farmer's field, which in turn can upgrade the skill and generate self-employment for the farmers.

1.4.14.1 College of Agriculture

With increased emphasis on agricultural education and promotion of scientific cultivation practices in the State, College of Agriculture, Tripura was established in 2007.

Scrutiny of records revealed that only graduate courses were offered by the college. Recently, Tripura University granted (June 2018) provisional affiliation for Post Graduate (PG) courses in Agronomy and Horticulture. However, PG programmes in these disciplines were not started in the college for want of required faculties[44] in each discipline. The College was suffering from shortage of teaching staff as only 24 faculties (31.17 *per cent*) were in position against 77 sanctioned posts. Out of ten research projects, only three research projects were completed and three another projects remained under progress while four projects were taken up in March 2018.

The Department stated (August 2018) that the approval of the State Finance Department was pending for recruitment of teaching staff and allocation of fund for PG courses. Besides, filling up vacancies of other teaching staff for existing courses was under consideration.

1.4.14.2 Upgraded Gram Sevak Training Centre

Agriculture Assistants of the Department were provided with two years' integrated training (40 per batch) at Upgraded Gram Sevak Training Centre (UGTC), Lembucherra on various subjects[45] as per approved syllabus (theory and practical) of the Department. The curriculum laid the provision for yearly target of training classes in terms of credit hours of 45 minutes each.

---

[44] One Professor and two Associate Professors

[45] (i) Soil Science, (ii) Agronomy, (iii) Horticulture, (iv) Entomology, (v) Plant Pathology, (vi) Agriculture Engineering, (vii) Agriculture Extension and (viii) Agriculture Statistics and Marketing

Scrutiny of records revealed that the achievement of credit hours ranged from 54.55 *per cent* (2014-15) to 78.46 *per cent* (2015-16) during 2014-18[46] in theory and 17.50 *per cent* (2014-15) to 70 *per cent* (2017-18) in practical skills, during the same period.

Principal, UGTC, Lembucherra stated (July 2017 and June 2018) in reply that due to examination, tests, frequent exposure visits, heavy rainfall and other unforeseen events the target of credit hours was not achieved.

The reply was not acceptable as target of credit hours was set by the Department after considering all the above-mentioned factors. Compromising the credit hours had an adverse effect on the performance of the service trainees/ Agriculture Assistants who played a vital role in implementation of the schemes at the ground level.

1.4.14.3 Krishi Vigyan Kendras

The Department established four Krishi Vigyan Kendras (KVKs) in four districts of the State as an innovative science based institution for imparting technical training to the farmers. Two KVKs[47] were opened in 2017-18 but were not put to operation (August 2018) while the other two KVKs[48] were functioning since 2005-06.

Scrutiny of records revealed that none of the KVKs had provisions for basic infrastructures like farmers' hostel, staff quarters, boundary fencing, plant diagnostic centres, processing units and administrative building in place. Besides, newly constructed KVKs were not equipped with e-linkage and on-line data base system in order to strengthen global access facilities through information and communication technology as envisaged in the KVK Guidelines.

The Department, while accepting the audit observation, stated (August 2018) that KVKs were established with limited infrastructure created by the Department in pre-existing government orchards. Therefore, the entire infrastructure could not be accommodated.

Performance of activities for awareness and training

On-Farm Trials (OFTs), Front-Line Demonstrations (FLDs)[49] and Training for farmers are three major farm support activities delivered by KVKs. The KVKs were required to conduct OFTs and FLDs in eight disciplines[50]. As per record, during 2013-18, two KVKs covered total 1,900 farmers by conducting 86 OFTs and 681 FLDs in four disciplines leaving four disciplines namely soil science, plant protection, agro forestry and home science, fully unattended except in 2017-18 where 50 FLDs

[46] The data/ information regarding target and achievement in respect of CH fixed for 2013-14 were not available with the Principal, UGTC

[47] At Unokoti and Gomati Districts

[48] At Dhalai and North Tripura Districts

[49] OFTs are conducted to identify the location specificity of agricultural technologies under various farming systems while FLDs aimed at establishing production potential of technologies on the farmers' fields

[50] Agronomy, Horticulture, Soil Science, Plant Protection, Animal Science, Home Science, Fishery and Agro Forestry.

were conducted in agro forestry sector at KVK, Panisagar (**Appendix 1.4.15**). Performance in respect of the disciplines duly covered under the projects was also not uniform during 2013-18. Insufficiency of seeds and other planting materials is one of the reasons for under achievement of the KVKs in this regard. The major focus of training by the KVKs is to impart need based practical work experience to the clientele like male and female farmers, village youths, extension functionaries, *etc*. As per record, 361 training programmes in 16 thematic areas were conducted against the target of 425. As a result, 497 targeted clientele could not be trained. Besides**,** it was also noticed that less number of training programmes were conducted on important thematic areas like farm machineries, drudgery reduction, agro forestry, soil health management, organic farming, *etc*. than that of other areas during 2013-18 **(Appendix 1.4.16)**. Thus, inefficient delivery of support services by the KVKs deprived potential farmers of technology dissemination activities through OFTs and FLDs in various disciplines and capacity building through training programmes under important thematic areas.

The Department stated (August 2018) that target was not fully achieved due to lack of manpower. Besides, construction of administrative building of the KVKs was not completed to resume smooth functioning of all disciplines properly.

1.4.14.4 Agricultural Technology Management Agency

The scheme 'Support to State Extension Programmes for Extension Reforms' aims at making extension system farmer driven and farmer accountable by disseminating technology to farmers through Agricultural Technology Management Agency (ATMA) at district level to operationalise the extension reforms on a participatory mode. Tripura State Agricultural Management and Extension Training Institutes (T-SAMETI) was formed in the State under supervision and guidance of State nodal officer of ATMA (Director of Agriculture) to ensure farmers oriented activities *viz.* mobilisation of farmers' groups, training/ exposure visits of farmers, arranging demonstration for empowering farmers, and improving their participation in technology dissemination process.

Scrutiny of records revealed that number of farmers trained against the targets ranged between 21.97 *per cent* (2015-16) and 100 *per cent* (2014-15) along with overall shortfall of 24.23 *per cent* during 2013-18. Exposure visit of farmers was organised only in 2013-14, 2016-17 and 2017-18 with overall shortfall of 56.53 *per cent*. The Department did not execute any inter-state exposure visit programme during 2013-18 while inter-state training programmes were conducted only in 2015-16. Performance in respect of organising demonstration programme was fully achieved except in 2015-16 where achievement was only 57.70 *per cent***.** (**Appendix 1.4.17**). Therefore, due to lack of exposure visits and shortfall in achievement of the other two activities, delivery of appropriate technology and improved agricultural practices to the farmers through extension programmes were not fulfilled.

While accepting the fact, the Director of T-SAMETI stated (August 2018) that the target had been fixed for each year keeping in mind the seasonal activities and necessity in the field *vis-à-vis* fund received from the GoI. Sometimes, it became hardly possible to achieve full target within the financial year as in almost every year last instalment of fund had been released during end of March.

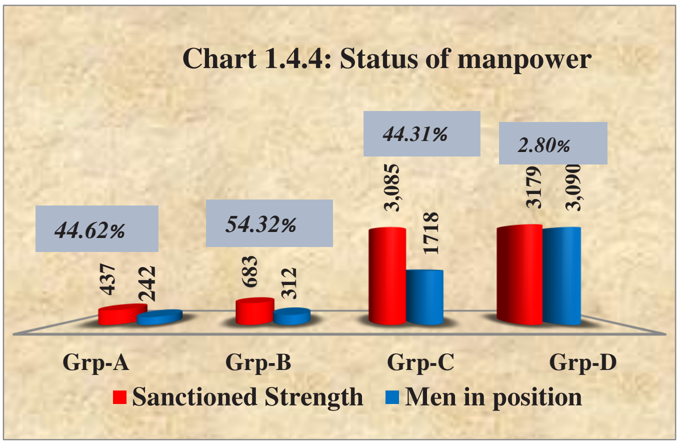
Recommendation No. 9

The Department should take steps for strengthening all existing KVKs, College of Agriculture, UGTC and ATMA, to improve quality of education research and extension activities and to develop agriculture information resources for farmers.

1.4.15 Human Resource Management of the Department

Efficient implementation of programmes and schemes depends on availability of adequate and qualified trained manpower. Considering the present and future needs, periodical assessment of requirement of manpower is essential to fulfil the objectives of the Department.

Records of the Department regarding availability of manpower (March 2018) against the different categories indicated large-scale vacancies as shown in **Chart 1.4.4**.



It can be seen from **Chart 1.4.4** that vacancies in Group 'A', 'B', and 'C' categories of staff ranged from 44 *per cent* to 54 *per cent*, whereas vacancy in Group D category was only three per *cent.*

Audit observed that there were substantial vacancies in some of the key posts ranging from 26 to 96 *per cent* (**Appendix 1.4.18**). Agriculture Officer, Agri Inspector at Sub-division level and Agri Assistant/ Village level worker (VLW) at Gram Panchayat (GP) level were providing agricultural extension services at grass root level. However, there were substantial number of vacancies in these three posts representing 61, 54 and 31 *per cent* respectively.

Vacancies in Group 'A', 'B' and 'C' category of staff would have adversely affected programmes and schemes implemented by the Department. Moreover, large-scale vacancies of staff especially in the posts of Agri Officer, Agri Inspector, Agri Assistance/ VLW affected the day to day functioning of the Department.

During the Exit Conference, the Department, however, assured that review of the sanctioned strength of different categories of staff would be done.

Recommendation No. 10

The Department should take necessary steps to reduce the shortage of staff for effective implementation of programmes and activities.

1.4.16 Internal Control and Monitoring

Internal controls are an integral component of an organisation's management process, which is designed to provide reasonable assurance towards efficient and effective management of programmes and financial reporting, reliability of operational data and compliance with applicable laws and regulations. Planning Section of the Directorate office and the Mission Directorate of SARS were responsible for overall monitoring of various programmes being implemented. Audit, however, noticed various deficiencies in internal control and monitoring as under:

a. Saving against the budgetary provision in every year, submission of UCs without incurring expenditure and retention of huge funds under Civil Deposit were indicative of weak monitoring and internal control at all levels in financial management. Besides, the Department submitted 100 *per cent* physical and financial achievement reports to the GoI under NFSM scheme despite shortfall in achievement under various interventions.

b. As per RKVY Guidelines, a State Level Standing Committee (SLSC) was responsible for sanctioning, monitoring and implementation of the projects sanctioned under the scheme. In view of this, SLSC had to meet as often as required and shall meet at least once in a quarter. Guideline also mandated engagement of third party for monitoring and evaluation of 25 *per cent* of the projects sanctioned by the State. However, it was noticed that against the stipulated 20 meetings, the SLSC met only six times in five years**.**

c. Weak monitoring mechanism at SA level reflected through implementation of SRI projects where assistance on cash was not provided as per prescribed norms.

d. Project Management Team (PMT) consisting of Consultant and Technical Assistants (TAs) was not constituted for effective monitoring and implementation of NFSM and NMOOP. Besides, separate State Level Monitoring Committee as mandated by NMOOP guideline was also not formed by the Department.

e. Agricultural marketing had deficiencies in proper monitoring from the side of the Market Board and APMCs.

1.4.17 Performance of the Department

Major Achievements

a) The production of certified seeds of paddy was in alignment with the target and had an increasing trend.

b) There was 90 *per cent* achievement in issue of Soil Health Cards (SHCs). Against the target of ₹ 2.25 lakhs of SHCs, the Department issued ₹ 2.03 lakh cards.

c) Farm power availability had an increasing trend during 2013-18 and it increased from 0.97 kW/ha (2013-14) to 1.16 kW/ha (2017-18) but it remained lower than the national average of 2.5 kW/ha.

d) All the above helped to narrow the gap between the requirement of food grain and actual production during 2013-14 (1.39 lakh MT) to 2016-17 (0.52 Lakh MT) with slight increase in 2017-18 (0.64 lakh MT).

Weakness

a) State Annual Plans (SAPs) for 2013-18 were prepared only after receipt of allocation of funds and there was delay in finalisation of SAPs.

b) The Finance Department released ₹ 1,492.40 crore against the budget estimate of ₹ 1,847.85 crore resulting in short release of ₹ 355.45 crore during 2013-18. Department spent ₹ 1,415.44 crore during 2013-18. There were persistent savings every year, which indicated a wide gap between planning and programme implementation while savings under non-plan were mainly due to vacant posts under different categories.

c) The Agriculture Department targeted installation of 5,336 Small Bore Deep Tube Wells (SBDTWs) during 2013-18 with a view to cover only 10,672 ha under irrigation, of which installation of 2,994 (56.11 *per cent*) SBDTWs was not done.

d) Prescribed assistance norms were not adopted under System of Rice Intensification while significant shortfall in implementation of various interventions was noticed under National Food Security Mission.

e) Even after meeting 94.50 *per cent* projected requirement of rice through domestic production, the State was dependent on PDS to ensure stable supply of rice to meet the demand of increasing population. This implied that the State could not achieve self-reliance in production of rice.

f) Administrative delay towards effective execution of major reforms under APMC Act, 2003 and e-NAM was also major area of concern.

g) There were substantial vacancies in some of the key posts ranging from 26 *per cent* to 96 *per cent,* which adversely affected programmes and schemes implemented by the Department.

1.4.18 Conclusion

Though the Department prepared State Annual Plans every year they did not prepare the long-term perspective plan. In case of NFSM scheme, bottom up approach in planning was completely missing in the annual action plans prepared by the Mission Director, NFSM. Budgetary as well as financial controls were found to be unsatisfactory as instances of persistent savings in every year, retention of huge cash balances by the DDOs, furnishing of UCs by the DDOs without incurring expenditure were noticed.

The Department did not procure fertilisers as per requirement, which had an adverse effect in production and productivity of the crops. Soil testing amenities of the Department were inadequate as three out of four STLs and one out of two MSTLs were not functioning due to non-installation of lab equipment and non-execution of repair works. The State could not attain self-sufficiency in meeting the requirement of population of the State as the Department failed to increase the production and productivity of the crops. Agriculture Marketing suffered from inadequate infrastructures, poor revenue generation and limited application of Board Fund, passive attitude of Market Board and APMCs, administrative delay towards implantation of major reforms under APMC Act, 2003 and e-NAM, *etc.*

PUBLIC WORKS DEPARTMENT (ROADS & BUILDINGS)

1.5 Incomplete bridges even after spending of ₹ 9.74 crore

Failure of the Department to ensure availability of clear site in time, delay in handing over of design and drawing to the contractor, *etc.* resulted in the work of three RCC bridges on Chailengta-Chawmanu Road remaining incomplete even after a lapse of nearly three years from the stipulated date of completion, rendering the expenditure of ₹ 9.74 crore incurred thereon idle.

Paragraph 15.1 (2) of CPWD Works Manual, 2007 provides that before approval of Notice Inviting Tender (NIT), availability of clear site, structural drawings and lay out plan, *etc.* were desirable.

The work, "Construction of three RCC bridges[51] on Chailengta-Chawmanu Road", was awarded (December 2013) to the lowest tenderer[52] at a cost of ₹ 8.45 crore[53] (31.50 *per cent* above the estimated cost of ₹ 6.43 crore) with stipulated completion time of 24 months. As per Measurement Book (MB), the works commenced in December 2013. The contractor was paid ₹ 9.74 crore against the value of work done for ₹ 9.96 crore up to 3rd Running Account (RA bill) (March 2016).

Test check (November–December 2017) of records[54] of the Executive Engineer (EE), Longtharai Valley Division, PWD (R&B) revealed that the entries made in the MB regarding start of work was wrong as the work could not commence till 10 April 2014. It was observed that though in the work order (December 2013) the contractor was requested to start the work immediately, the drawing & design was not handed over until February 2014[55]. The progress of work of all the three bridges suffered from the very beginning as discussed below:

a. At Durgacherra, the work could not be started from 24 December 2013 for about eight months due to delay in according approval of the Competent Authority for fixing alignment of the bridge, remained suspended for about two months for arrangement of load testing apparatus. Finally, the work was suspended in December 2015 due to non-availability of clear dimension of available drawing in abutment cap portion.

b. At Gurucharancherra, the work could not be started from 24 December 2013 for about four months due to non-availability of design & drawing and due to non-availability of clear site. Finally, the work was suspended in March 2015 due to land dispute.

---

[51](i) Over local Durgacherra at Ch. 6.85 Km; (ii) Over local Gurucharancherra at Ch. 8.35 Km; and (iii) Over local Hazacherra at Ch. 9.35 Km"

[52]Shri Ashes Deb, Contractor

[53] Draft Notice Inviting Tender was approved in June 2013

[54] Agreement, Measurement Books, vouchers, Hindrance Register, technically sanctioned detailed estimate, tender document, *etc.*

[55] As per Hindrance Register

c. At Hezacherra, the work could not be started from 24 December 2013 for about six months due to non-availability of design and drawing, remained suspended for about three months due to non-availability of clear dimension of available drawing in abutment cap portion. Finally, the work was suspended in February 2016 due to non-approval of deviation.

The status of all three bridges as found during joint physical verification (December 2017) is shown in **Photographs 1.5.1, 1.5.2** and **1.5.3**.

Photograph 1.5.1:Bridge over Durgacherra

Photograph 1.5.2: Bridge over Gurucharancherra. Only Pile work (partial) done

Photograph 1.5.3: Bridge over Hezacherra

The above facts were further confirmed by the EE, that the above three bridges remained incomplete as of November 2018 due to suspension of work by the agency.

Government stated (October 2018) that (i) the site dispute/ problem was initially a prime cause for time overrun for the work of the bridges; (ii) procrastinating attitude of the contractor had also resulted in the slow progress inviting time overrun of the works; (iii) sometimes it caused delays to supply requisite drawing as well as to convey field level decisions; and (iv) appropriate actions had been taken by assuring the contractor for early completion of the works.

Thus, failure of the Department to ensure availability of clear site in time, delay in handing over of design and drawing to the contractor, delay in fixation of alignment and approval of deviation from the approved estimates resulted in the work of three RCC bridges on Chailengta-Chawmanu Road remaining incomplete even after a lapse of nearly three years from the stipulated date of completion. In view of the reasons for suspension of these works, the possibility of completion of the work is remote and deterioration in the quality of the works executed so far could not be ruled out. Therefore, expenditure of ₹ 9.74 crore incurred on the incomplete work, turned idle.

1.6 Extra expenditure

Detailed Project Reports of two flyovers in Agartala city prepared by the Consultant were not based on ground reality, which led to extra expenditure of ₹ 78.37 lakh towards detailed sub-soil investigation at abutment/ pier locations carried out again by the construction agency.

For construction of two flyovers in Agartala city, the consultancy services for preliminary and detailed engineering including preparation of detailed project report (DPR) were awarded[56] (December 2012) to M/s VKS Infratech Management Private Limited, Delhi (Consultant) @ 0.43 *per cent* of project cost of approved DPR for flyover at Nagerjala-Battala area and @ 0.59 *per cent* of project cost of approved DPR for flyover at Radhanagar Bus Stand area.

As per the agreement made with the Consultant, the scope of work/ services involved *inter alia* detailed geo-technical investigation (including recommendations regarding safe bearing capacity of soil for open foundation for retaining walls, piers in terms of depth and their load carrying capacity), detailed engineering drawings, detailed estimates based on Schedule of Rates (SOR)-2011 and also rendering all sorts of assistance to the client (PWD, R&B) during construction of flyovers. Further, detailed geo-technical investigation was to be conducted by the Consultant as required in the project and the result should include recommendations regarding safe bearing capacity of soil for open foundation for retaining walls, foundations for piers in terms of depth and their load carrying capacity as per initial test, *etc.* and as site conditions warranted. Total value of approved DPR, as prepared by the Consultant, was ₹ 256.56 crore[57]. The Consultant was paid (up to March 2016) ₹ 1.07 crore against total value of work done for ₹ 1.09 crore.

After according administrative approval and expenditure sanction for ₹ 250.86 crore[58] in July 2014 and technical sanction for ₹ 117.18 crore (including ₹ 3.42 crore as three *per cent* contingencies)[59] in November 2014, the work under the nomenclature of "Improvement of Urban North South corridor for Agartala city in the State of Tripura/ Package–I[60] and Package-II[61]:" was awarded (May 2015) to M/s NCC Ltd., Kolkata

---

56 With the approval (20 November 2012) of the Work Advisory Board

57 Flyover at Nagerjala-Battala area: ₹ 227.52 crore and Flyover at Radhanagar Bus Stand area: ₹ 29.04 crore

58 (1) Construction of Flyover at Drop Gate -Nagerjala- Battala to Fire Brigade Area (₹ 225.76 crore) and (2) Construction of 2-Lane Steel Arch Bridge with approaches from North Gate to Radhanagar Bus Stand Area (₹ 25.10 crore)

59 AA & ES for the work was sanctioned in July 2014 on the basis of its DPR value where rate of the most items was derived based on analysis of the then prevailing market rates. Technically sanctioned estimate of the work was prepared by converting the DPR value of the items into Tripura Schedule of Rate (TSR) 2011 of State PWD alongwith market analysis of rates of some items which were not available in the TSR 2011. Accordingly, Technical Sanction of the work with reduced value was accorded in November 2014.

60 Construction of 2.260 Km long elevated 2-lane flyover with RE wall for ramps approaches including bridge across river Haora and at grade c/w along both side from Drop gate to Fire Station via Battala Chowk in the city of Agartala

61 Construction of 143 metres long 2-lane steel arch bridge across river Katakhal and its approaches of length 445 metres approx. of flexible pavement including junction improvement and other road appurtenances in the city of Agartala

(Agency) at the tender value of ₹ 249.95 crore[62] with stipulation to complete the work by November 2017[63]. The work commenced in May 2015 and was in progress (November 2018). The Agency was paid (September 2018) ₹ 248.59 crore against the total value of work done for ₹ 288.40 crore (including five extra items valued ₹ 3.31 crore and price escalation payment of ₹ 9.79 crore) up to 25th RA Bill.

The Consultant was also awarded (16 February 2016) the work of "Construction Supervision Services for Improvement of Urban North South corridor for Agartala city in the State of Tripura/ Package–I and Package-II", the single bidder, at ₹ 6.60 crore. The value of work done for Construction Supervision Services was ₹ 2.31 crore, which was paid (up to December 2017).

Test check (January 2018) of records of the Executive Engineer, Agartala Division-I, PWD (R&B) revealed that as per scope of work of the consultancy services, the detailed geo-technical sub-soil investigation had to be conducted by the Consultant before preparation of DPR. It was clearly stated in the feasibility report prepared (March 2013) by the Consultant that for the design of the piles, the parameters of soil considered for design would be as per the geo-technical investigation report to be prepared during DPR stage.

It was, however, seen that the item of detailed sub-soil investigation at abutment/ pier locations as per relevant Indian Standard (IS)/ Indian Road Congress (IRC) Codes specification had been kept by the Consultant in the Bill of Quantities (BOQ)/ agreement. Accordingly, the Agency had carried out detailed sub-soil investigation at abutment/ pier locations at ₹ 78.37 lakh (up to 25thRA Bill).

In reply to an audit query (11 January 2018) regarding inclusion of the detailed sub-soil investigation in the BOQ/ agreement (with the Agency), the Executive Engineer stated (January 2018) that sub-soil investigation was done by the Consultant as per requirement of the DPR and for design of the foundation of structure. The Executive Engineer also stated that provision for sub-soil investigation was incorporated in the BOQ as per IRC guideline[64] and during construction stage, executing agency also needed to carry out confirmatory bore holes at various required locations to confirm the characteristics of the soil which was considered during DPR stage based on which design was made.

The reply was not acceptable as Clause 3.1 of "IRC SP 54-2000 –Project Preparation Manual for Bridges" provides that preparation of the project involves three stages *viz*, (i) pre-feasibility report, (ii) feasibility report/ preliminary project report and (iii) detailed project report. In preparation of detailed engineering, the detailed survey and investigation were to be carried out and detailed design was to be worked out on

---

[62] 119.71 *per cent* above the estimated cost of ₹ 113.76 crore based on SOR 2011

[63] 30 months for Package-I and 18 months for Package-II

[64] Clause 704.1 (iii) of IRC: 78-2014 -Standard Specifications and Code of Practice for Road Bridges, Section: VII, Foundations and Substructure. The same provision also exists in IRC: 78-2000

the basis of results of survey and investigation. The sub soil investigation was to be carried out in pre-feasibility study stage as well as preliminary investigation stages as per IRC 78 as indicated under Clause 5.3.8 and 5.6.5 of IRC SP 54 2000. At last, the sub soil investigation was to be carried out as per IRC 78 before preparation of detailed project report under Clause 6.1.2 of the IRC SP 54 2000. The above Clause also indicates that before final investigation is taken up, it is necessary to review the extent of usefulness and reliability of the data obtained from preliminary investigation. It also indicated that no further investigation is required in case preliminary investigation provided adequate information/ data to carry out detailed engineering design. After that, detailed design along with detailed cost estimate was to be prepared as per Clause 6.2 and 6.3 of IRC SP 54 2000.

Therefore, inclusion of sub-soil investigation at abutment/ pier locations in the BOQ/ agreement indicated that the DPR prepared by the Consultant, was not justified as sub-soil investigation was to be carried out in three stages before preparation of detailed project report as per IRC SP 54 2000. Hence, expenditure of ₹ 78.37 lakh incurred towards detailed sub-soil investigation at abutment/ pier locations again by the construction Agency was extra.

The matter was discussed with the Principal Secretary, Public Works Department in a meeting held on 08 November 2018, wherein it was opined by Audit that the DPR was loosely prepared by the Consultant and was not based on ground reality, which ultimately led to extra expenditure of ₹ 78.37 lakh.

The Government stated (December 2018) that an investigation by a special team had been undertaken for flyover works and reply would be furnished after completion of the enquiry.

1.7 Extra expenditure

Preparation of Bill of Quantities on assumption led to an extra expenditure of ₹ 54.81 lakh on construction of Indoor Gymnasium Hall at Agartala.

Para 2.7 of the CPWD Works Manual, 2007 *inter alia* provides for preparation of site/ soil data at the pre-construction stage. Further, as per IS:1892-1979 (Indian Standard Code of Practice for Subsurface Investigations for Foundations), it was imperative to take into consideration the sub-soil investigation to arrive at the number, length and spacing of the piles.

To provide consultancy services[65] of the work of Construction of Indoor Gymnasium Hall at Netaji Subhash Regional Coaching Centre, Agartala[66], the offer of M/s STUP Consultants Private Limited, Kolkata (the Consultant) was accepted (June 2010) at 2.75 *per cent* of the total approved preliminary cost estimate of the project. Based on

[65] Geo-technical sub soil investigation Report, Submission of preliminary cost estimates, the detailed cost estimates and the bid document (unpriced bill of quantities) along with drawing good for call of tenders, *etc.*

[66] Administrative approval and expenditure sanction for ₹ 24.70 crore was accorded (May 2010) by the Education (Youth Affairs & Sports) Department (under Additional Central Assistance 2009-10)

the estimates prepared by the Consultant for the work (estimated cost put to tender ₹ 30.07 crore[67]), a restricted tender was invited (August 2010) from seven short listed agencies, out of which, M/s Jaypee Projects Ltd., Kolkata (the Agency) quoted the lowest price at ₹ 33.35 crore[68]. With the approval (09 December 2010) of the Work Advisory Board, work order was issued (December 2010) to the Agency at a negotiated reduced price of ₹ 32.75 crore with completion time of 24 months. The work commenced in February 2011 and was completed in December 2017. Against the value of work done for ₹ 42.88 crore up to 24th RA bill (as the final bill had not been submitted), the agency was paid (January 2018) ₹ 40.45 crore.

Test check (January-February 2018) of records of the Executive Engineer, Agartala Division-III, PWD (R&B) showed that the consultant had prepared (July 2010) the estimates as well as Bill of Quantities (BOQ) without taking into consideration geo-technical sub-soil investigation report which became available to them only on 02 September 2010 *i.e.* one month after the date of invitation of tender. Based on the BOQs prepared by the consultant, the Department invited bids in August 2010. As such, the pile capacity, length of pile and number of piles worked out by the consultant at tendering stage were based on assumptions. Due to this, up to 24th RA bill, there were huge deviations on higher side, ranging from 51.79 to 230.83 *per cent,* in execution of three items of work *viz.* (i) 600 mm diameter pile in piling work; (ii) M 30 concrete in sub structure in Reinforcement Cement Concrete; and (iii) TMT bar in Reinforcement.

Further scrutiny showed that due to the magnitude of the deviations, the Department had to pay higher rate for deviated quantity beyond 20 *per cent* of the estimated quantities of these three items of works, which resulted in an extra avoidable expenditure of ₹ 54.81 lakh to the construction agency. Had the estimates been prepared as per the geo-technical investigation report, huge variations in the executed quantity could have been avoided. The details of total deviated quantities executed as against estimated quantities (along with percentage of total deviation), higher (negotiated) rates[69] allowed as against the agreement rates and extra payment of ₹ 54.81 lakh made to the agency are shown in **Appendix 1.7.1.**

On this being pointed out, the Chief Engineer, Public Works Department (Buildings) stated (June 2018) that (i) due to non-availability of clear site at the proposed construction area[70], the tender documents and BOQ were prepared by the consultant on assumption of safe bearing capacity anticipated at the proposed site by envisaging RCC bored cast-in-situ pile foundation, as there was priority by the Youth Affairs and Sports Department for early commencement of the work for infra-structural development in gymnastic wing and as clear site for adequate bore-holes for sub-soil

---

[67] Technical sanction for ₹ 30.97 crore (including three *per cent* contingencies) was accorded in October 2010 by the Chief Engineer, PWD (R&B)

[68] 8.897 *per cent* above the estimated cost of ₹ 30.07 crore put to tender

[69] Up to 20 *per cent* excess: on agreement rate and beyond 20 *per cent* excess: on negotiated rate, as negotiated by the agency and the Department

[70] Occupied with the old indoor Gymnasium hall and some other semi-permanent structures

geo-technical investigation was not possible within the lay out zone of the building, the codal provision which are usually followed for Subsurface Investigations for Foundations as per IS:1892-1979 could not be done; (ii) due to lower pile capacity worked out based on detailed soil report data than considered during the tender, the length of piles and the number of piles worked out to be more than the estimated quantity; (iii) it was imperative that the instant structure was a special category one where RCC supporting structural columns of the Gymnasium Hall were spaced about 63 meters (200 feet) and therefore was of major structural module, requiring careful considerations in actual design for safety aspect in particular; and (iv) as per Public Works Manual, there is a provision for 100 *per cent* deviation in foundation works for specific and special reason.

The above reply of the Chief Engineer was endorsed by the Government in October 2018.

The reply was not acceptable as (i) the work, stated to have been taken up on priority for early commencement, though commenced in February 2011 was completed only in December 2017 *i.e.* after a lapse of almost four years from the stipulated date (February 2013); (ii) citing urgency, the Department, ignoring the sub-soil investigation report vital for deciding the bearing capacity, length, and the number of piles, rushed through the tender process and went ahead with the construction work; (iii) the Department, though admitted the fact that the building was a special category structure, requiring careful considerations in actual design for safety aspect, did not give careful consideration to the sub-soil investigation report and went ahead with the tender based on the estimates and BOQ prepared on assumption; and (iv) the specific and special reason for 100 *per cent* deviation in foundation works had not been stated.

Hence, taking up the work on the plea of priority, without the geo-technical investigation report, merely on the basis of the provision of 100 *per cent* deviation limit in foundation works as per Public Works Manual, was not only unreasonable but also had resulted in an extra expenditure of ₹ 54.81 lakh, which was avoidable.

1.8 Extra expenditure

Failure of the Department to handover clear site to the contractor in time not only caused delay in completing the works but also resulted in an extra expenditure of ₹ 50.65 lakh.

Section 15.1 (2) of the Central Public Works Department (CPWD) Works Manual 2007 provided that before approval of Notice Inviting Tender (NIT), availability of clear site *inter alia* was desirable.

Test check (November–December 2017) of records of the Executive Engineer, Kumarghat Division, PWD (R&B) revealed that construction of two Re-inforced Cement Concrete (RCC) bridges over Ratacherra (SPT Bridge No. 1) and Juraicherra (SPT Bridge No.2) on the Manu-Dhumacherra-Fatikroy Road (Ratacherra) to Emrapassa (at Ch. 0.3 Km and 3 Km) was awarded to the lowest tenderer (Shri

Pranab Paul) at ₹ 3.58 crore and ₹ 4.13 crore respectively[71] in May 2010 and June 2010 with completion time of 36 months for each. The works, commenced in July 2010 and August 2010 respectively, were closed in March 2012 due to delay in handing over of clear site. As the land was not available (till February 2011), the contractor was not willing to execute further work due to increase of material and labour costs. Total value of works done by the contractor was ₹ 81.15 lakh (Bridge No. 1) and ₹ 81.39 lakh (Bridge No. 2) respectively, which were paid in October 2015. The works done by the contractor included a sub-way by bailey bridge for each of the two bridges (under "Diversion work").

With reduced scope of work, the work of the above two bridges[72] were awarded to two contractors at their tendered value of ₹ 2.12 crore (Bridge No. 1: Shri Ashes Deb) and ₹ 2.10 crore (Bridge No. 2: Md. Gias Uddin Choudhury) respectively (32 *per cent* and 13.99 *per cent* above the estimated costs) in June 2014 and February 2014 with stipulated completion time of 21 months for each. The works commenced in February 2015 and April 2014 respectively. The work of Bridge Nos. 1 and 2 was completed in January 2018 and July 2018 respectively. As of June 2018, the total value of work done for Bridge No. 1 was ₹ 2.15 crore (up to 6th RA & Final bill) against which the contractor was paid (June 2018) ₹ 1.82 crore and for Bridge No. 2 the total value of work done (up to 8th RA bill) was ₹ 1.77 crore, which was paid (December 2017) to the contractor.

A comparison between the items of works of the completed and the closed agreements revealed that there was cost differences in execution of the works, leading to an extra expenditure of ₹ 50.65 lakh[73] as of June 2018, as shown in **Appendices 1.8.1** & **1.8.2.** The extra expenditure would increase on preparation of the final bill of the other bridge (Bridge No. 2).

Thus, failure of the Department to abide by the provision of the CPWD Works Manual regarding availability of clear site, led to closure of the works. Subsequently the works were executed through other two contractors at higher rates. Non-availability of clear site not only caused delay in completing the works but also resulted in an extra expenditure of ₹ 50.65 lakh.

While accepting the fact of non-availability of clear site which led to closure of the original works, Government stated (October 2018) that (i) the second award of the works were not the balance work of the first award, and (ii) the second award of work

---

[71] 3.98 *per cent* and 3.44 *per cent* below the estimated costs of ₹ 3.90 crore (including Road work and Diversion work valued ₹ 1.97 crore) and ₹ 4.49 crore (including Road work and Diversion work valued ₹ 1.93 crore)

[72] Estimated cost: ₹ 1.65 crore for Bridge No. 1 (after excluding Road work and Diversion work valued ₹ 1.97 crore from the original scope of work) and ₹ 1.90 crore for Bridge No. 2 (after excluding Road work and Diversion work valued ₹ 1.93 crore from the original scope of work)

[73] ₹ 34.16 lakh in Bridge No. 1 and ₹ 16.49 lakh in Bridge No. 2

of both the bridges were made on the basis of modified drawing and modified quantity/ rate for which there occurred a savings of ₹ 3.49 crore[74].

The reply was not acceptable as (i) in the second award, the original scope of both the works was reduced[75], and (ii) in both the works, the Diversion works were done in the first award whereas the Road works were totally excluded from the estimates in the second award and the difference of the tendered amounts of the works had been shown by the Department as savings of ₹ 3.49 crore, which is hypothetical.

The extra expenditure of ₹ 50.65 lakh, as calculated in audit was the result of execution of the works at higher rates after closure of the works due to non-availability of clear site. Had the provision of the CPWD Works Manual regarding availability of clear site been followed before issue of original NITs, the extra expenditure could have been avoided.

[74] ₹ 1.46 crore *plus* ₹ 2.03 crore, being the difference between the tender value of first award and second award of Bridge No. 1 (₹ 3.58 crore - ₹ 2.12 crore) and Bridge No. 2 (₹ 4.13 crore - ₹ 2.10 crore) respectively

[75] Bridge No. 1 by ₹ 1.97 crore after excluding Road work for ₹ 1.20 crore and Diversion work for ₹ 0.77 crore and Bridge No. 2 by ₹ 1.93 crore after excluding Road work for ₹ 1.15 crore and Diversion work for ₹ 0.78 crore)